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## D.R. JOHNSON

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## **Quarterly Market Review**

Second 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 Canadian, US, and international markets.

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

## Overview:

**Market Summary** 

World Stock Market Performance

Canadian Stocks

**US Stocks** 

International Developed Stocks

**Emerging Markets Stocks** 

Country Returns

Real Estate Investment Trusts (REITs)

**Fixed Income** 

Global Fixed Income

Impact of Diversification

Quarterly Topic: Three Crucial Lessons for Weathering the Stock Market's Storm

**Appendix** 



## **Quarterly Market Summary**

Index returns



	Canadian Stock Market	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	Canadian Bond Market	Global Bond Market
Q2 2022			STOCKS			ВО	NDS
	-13.19%	-13.97%	-11.71%	-8.55%	-14.51%	-5.66%	-4.35%
Since Jan. 2001							
Average Quarterly Return	1.9%	2.4%	1.0%	2.2%	2.0%	1.1%	1.0%
Best	20.0%	16.8%	15.8%	27.9%	22.2%	5.9%	4.4%
Quarter	2009 Q2	2020 Q2	2009 Q2	2001 Q4	2009 Q3	2020 Q2	2008 Q4
Worst	-22.7%	-14.0%	-16.8%	-23.5%	-25.8%	-7.0%	-5.0%
Quarter	2008 Q4	2022 Q2	2008 Q3	2008 Q3	2008 Q4	2022 Q1	2022 Q1

### In CAD

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.

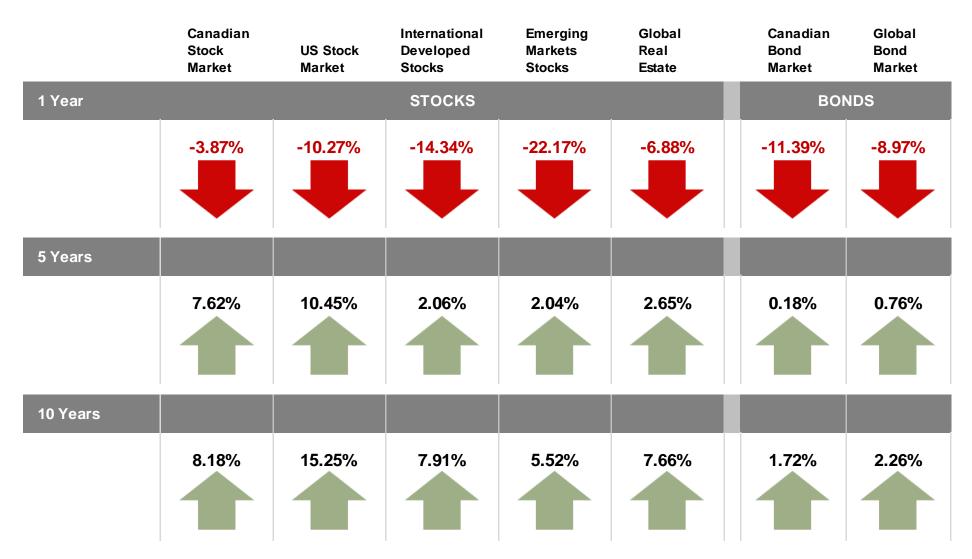
Market segment (index representation) as follows: Canadian Stock Market (S&P/TSX Composite Index), US Stock Market (Russell 3000 Index [net of tax]), International Developed Stocks (MSCI EAFE Index [net dividends]), Emerging Markets (MSCI Emerging Markets Index [net dividends]), Global Real Estate (S&P Global REIT Index [net dividends]), Canada Bond Market (FTSE Canada Universe Bond Index), and Global Bond Market (Bloomberg Global Aggregate Bond Index [hedged to CAD]). S&P/TSX 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. FTSE fixed income indices © 2022 FTSE Fixed Income LLC, all rights reserved. Bloomberg data provided by Bloomberg.



## Long-Term Market Summary

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Index returns as of June 30, 2022



In CAD.

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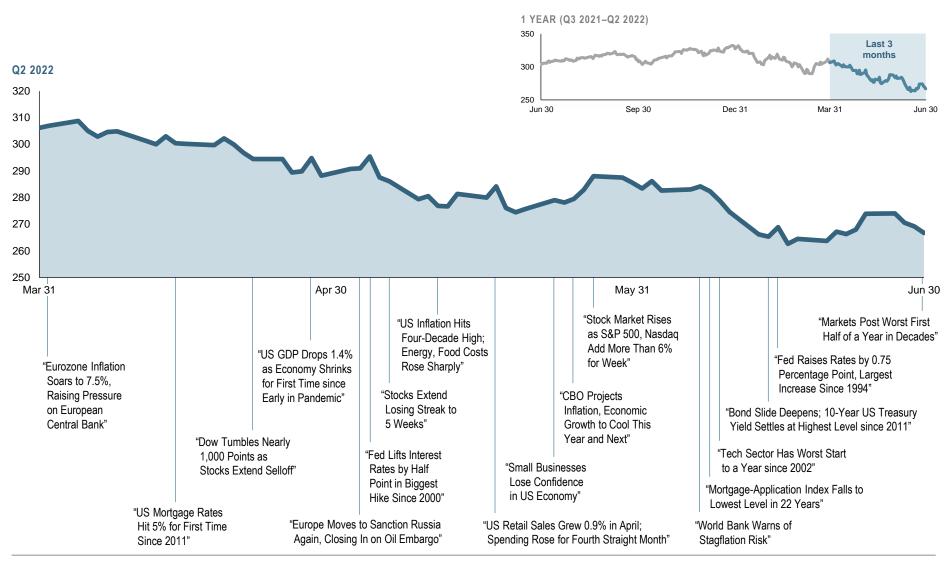
Market segment (index representation) as follows: Canadian Stock Market (S&P/TSX Composite Index), US Stock Market (Russell 3000 Index [net of tax]), International Developed Stocks (MSCI EAFE Index [net dividends]), Emerging Markets (MSCI Emerging Markets Index [net dividends]), Global Real Estate (S&P Global REIT Index [net dividends]), Canada Bond Market (FTSE Canada Universe Bond Index), and Global Bond Market (Bloomberg Global Aggregate Bond Index [hedged to CAD]). S&P/TSX 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. FTSE fixed income indices © 2022 FTSE Fixed Income LLC, all rights reserved. Bloomberg data provided by Bloomberg.





## World Stock Market Performance

MSCI All Country World Index with selected headlines from Q2 2022



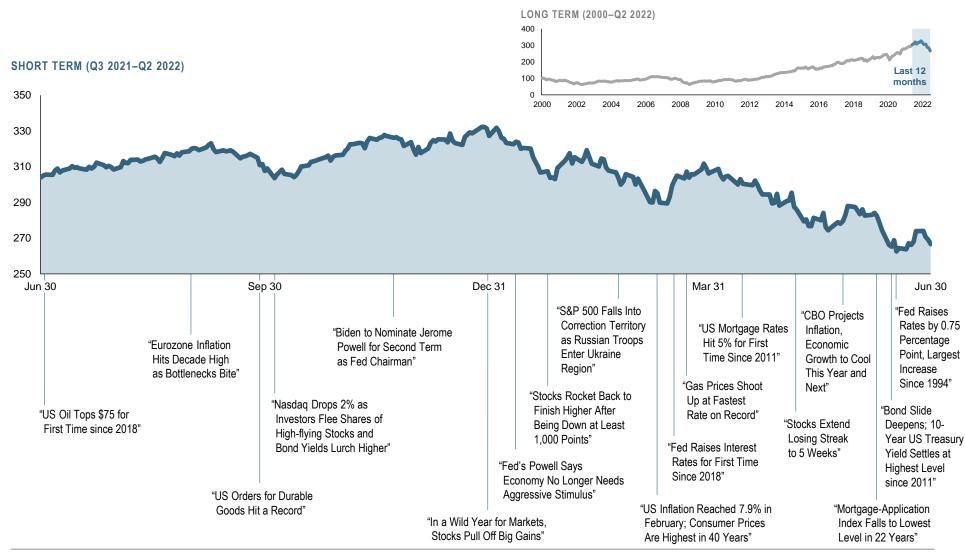
These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.



## World Stock Market Performance

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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.



## Canadian Stocks

## Second quarter 2022 index returns

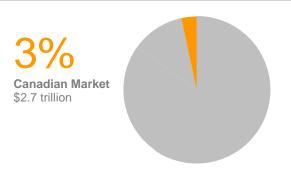
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The Canadian equity market posted negative returns for the quarter, outperforming US equity markets but underperforming international developed and emerging equity markets.

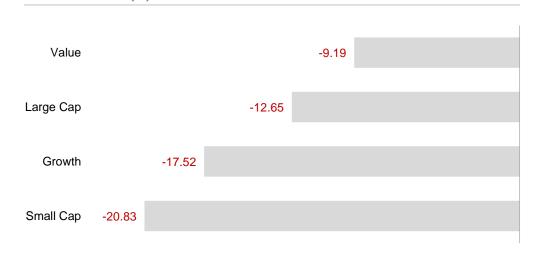
Value outperformed growth.

Small caps underperformed large caps.

## World Market Capitalization—Canada



## Ranked Returns (%)



## Period Returns (%)

\* Annualized

Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
Value	-9.19	0.28	8.64	8.61	7.59	8.26
Large Cap	-12.65	-9.61	-2.41	8.73	8.48	8.92
Growth	-17.52	-20.55	-16.72	3.10	4.60	5.85
Small Cap	-20.83	-14.17	-13.81	6.92	3.43	4.27

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

Market segment (index representation) as follows: Large Cap (S&P/TSX 60 Index), Small Cap (S&P/TSX Small Cap Index), Value (MSCI Canada Value Index), and Growth (MSCI Canada Growth Index). All index returns are net of withholding tax on dividends. World Market Cap represented by S&P/TSX Composite Index, Russell 3000 Index, MSCI EAFE IMI Index, MSCI Emerging Markets IMI Index. S&P/TSX data © 2022 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. MSCI data © MSCI 2022, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.



## **US Stocks**

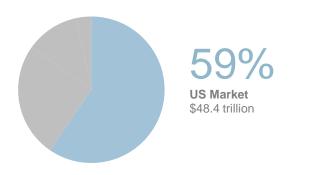
## Second quarter 2022 index returns

The US equity market posted negative returns for the quarter, underperforming Canadian, international developed, and emerging equity markets.

Value outperformed growth.

Small caps underperformed large caps.

## World Market Capitalization—US



## Ranked Returns (%)



## Period Returns (%)

\* Annualized

Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
Value	-9.69	-11.58	-4.18	5.63	6.12	12.22
Large Cap	-14.04	-19.45	-9.79	9.18	10.29	14.87
Marketwide	-14.08	-19.60	-10.64	8.79	9.90	14.63
Small Cap	-14.57	-21.95	-22.34	3.39	4.64	11.52
Growth	-18.29	-26.72	-16.62	11.06	13.13	16.69

In CAD.

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Market segment (index representation) as follows: Marketwide (Russell 3000 Index), Large Cap (Russell 1000 Index), Small Cap (Russell 2000 Index), Value (Russell 3000 Value Index), and Growth (Russell 3000 Growth Index). Russell 3000 Index is used as the proxy for the US market. All index returns are net of withholding tax on dividends. World Market Cap represented by S&P/TSX Composite Index, Russell 3000 Index, MSCI EAFE IMI Index, and MSCI Emerging Markets IMI Index. 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.



## International Developed Stocks

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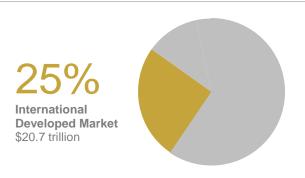
Second quarter 2022 index returns

The international developed equity market posted negative returns for the quarter, outperforming US and Canadian equity markets but underperforming emerging equity markets.

Value outperformed growth.

Small caps underperformed large caps.

## **World Market Capitalization—International Developed**



# Value -5.40 Large Cap -7.83 -11.71 Growth -14.16

-10.54

## Period Returns (%)

-14.99

Small Cap

\* Annualized

Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
Value	-9.54	-10.25	-8.27	-0.25	0.38	6.73
Large Cap	-11.71	-17.86	-14.34	0.64	2.06	7.91
Growth	-14.16	-25.25	-20.58	0.88	3.33	8.82
Small Cap	-14.99	-23.11	-20.81	0.69	1.58	9.73

### In CAD.

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

Market segment (index representation) as follows: Large Cap (MSCI EAFE Index [net dividends]), Small Cap (MSCI EAFE Small Cap Index [net dividends]), Value (MSCI EAFE Value Index [net dividends]), and Growth (MSCI EAFE Growth Index [net dividends]). All index returns are net of withholding tax on dividends. World Market Cap represented by S&P/TSX Composite Index, Russell 3000 Index, MSCI EAFE IMI Index, MSCI Emerging Markets IMI Index. S&P/TSX data © 2022 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. MSCI data © MSCI 2022, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.



## **Emerging Markets Stocks**

Second quarter 2022 index returns

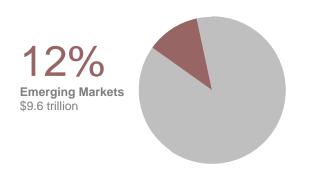
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The emerging equity market posted negative returns for the quarter, outperforming Canadian, US, and international developed equity markets.

Value outperformed growth.

Small caps underperformed large caps.

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



## Ranked Returns (%)



## Period Returns (%)

\* Annualized

Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
Value	-7.91	-12.06	-15.20	-1.39	1.11	3.87
Large Cap	-8.55	-15.88	-22.17	0.13	2.04	5.52
Growth	-9.16	-19.40	-28.30	1.44	2.78	7.03
Small Cap	-13.67	-18.34	-17.41	5.33	3.34	6.79

### In CAD.

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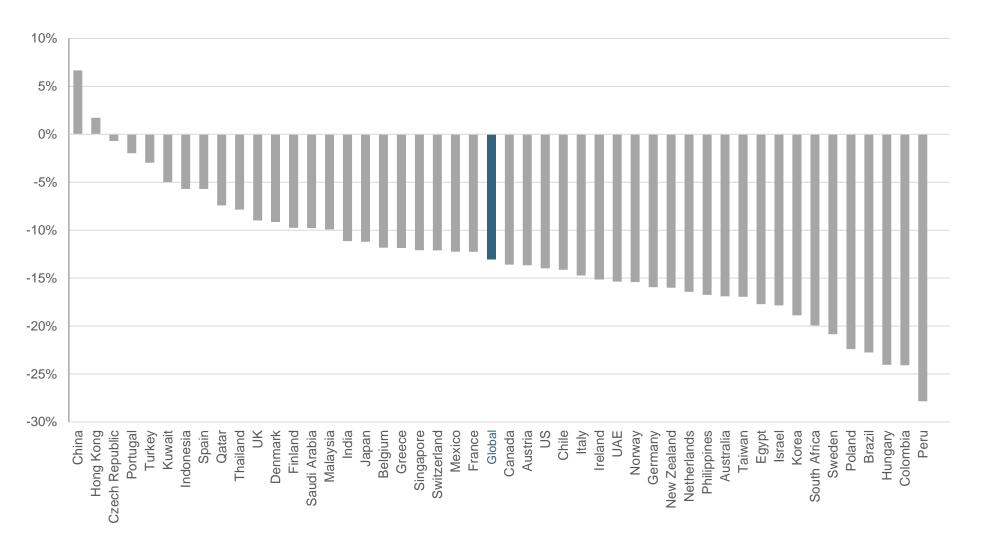
Market segment (index representation) as follows: Large Cap (MSCI Emerging Markets Index [net dividends]), Small Cap (MSCI Emerging Markets Small Cap Index [net dividends]), Value (MSCI Emerging Markets Value Index [net dividends]), and Growth (MSCI Emerging Markets Growth Index [net dividends]). All index returns are net of withholding tax on dividends. World Market Cap represented by S&P/TSX Composite Index, Russell 3000 Index, MSCI EAFE IMI Index, MSCI Emerging Markets IMI Index. S&P/TSX data © 2022 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. MSCI data © MSCI 2022, 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

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Second quarter 2022 index returns



### In CAD.

## 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 Canada, where the S&P/TSX Composite is used, and the United States, where the Russell 3000 Index (net of tax) 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. S&P/TSX 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.



## Real Estate Investment Trusts (REITs)

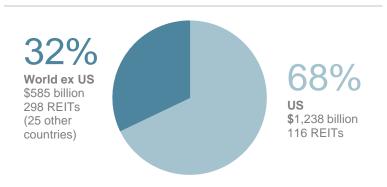
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Second quarter 2022 index returns

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



## **Total Value of REIT Stocks**



Period Returns (%)	* /	Annualized				
Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
Global ex US REITS	-14.80	-18.23	-14.29	-4.79	0.06	5.94
US REITS	-15.42	-19.47	-2.50	2.10	4.14	9.15

### In CAD.

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.



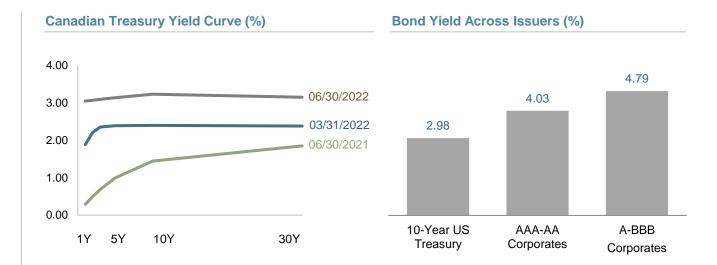
## **Fixed Income**

## Second quarter 2022 index returns

Interest rates increased across all maturities in the Canadian government bond market for the quarter. The Canadian government yield curve flattened during the period but remained generally upwardly sloped, with the short-term segment being the steepest segment.

Realized term premiums in Canadian dollar-denominated bonds were negative during the period as longer-term bonds underperformed their shorter-term counterparts.

Realized credit premiums were also negative during the period as corporate bonds underperformed their government counterparts.



### Period Returns (%) \*Annualized **QTR Asset Class** YTD 1 Year 3 Years\* 5 Years\* 10 Years\* FTSE Canada 30 Day T-Bill 0.21 0.25 0.31 0.61 0.86 0.79 FTSE World Government Bond Index 1-5 Years -0.95 -3.29-3.79-0.080.73 1.26 (hedged to CAD) FTSE World Government Bond Index 1-5 Years (CAD) -1.14 -5.73 -6.15-2.44-0.701.31 FTSE Canada Short-Term Bond Index -4.39-4.790.05 0.90 1.42 -1.46 Bloomberg Global Aggregate Bond Index -9.10 -8.97 0.76 2.26 -4.35-1.29(hedged to CAD) FTSE Canada Universe Bond Index -5.66 -12.23-11.39-2.300.18 1.72

In CAD.

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. Source: ICE BofA government yield. 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<sup>TM</sup>, 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.



## Global Fixed Income

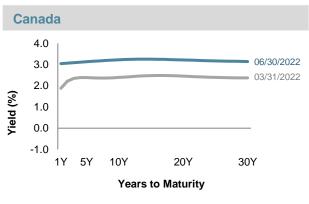
## Second quarter 2022 yield curves

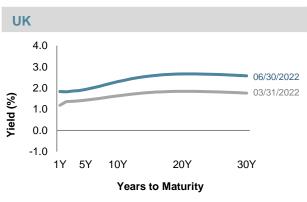
Interest rates generally increased across maturities within global developed markets for the quarter.

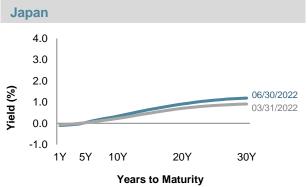
Realized term premiums were negative in global developed markets with longer-maturity bonds underperforming shorter-maturity bonds.

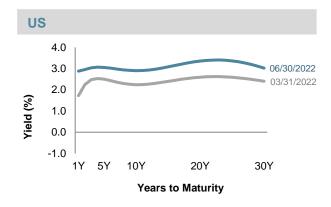
In Germany, short-term nominal interest rates increased to become positive during the quarter. In Japan, short-term nominal interest rates remained negative.

## Yield (%) UK Yield (%)













## Changes in Yields (bps) Since 3/31/2022

	1Y	5Y	10Y	20Y	30Y
Canada	116.2	74.7	83.5	76.4	77.0
US	115.5	55.1	66.3	76.0	62.3
UK	64.5	50.6	66.7	81.9	81.6
Germany	83.1	68.9	84.9	103.8	95.7
Japan	-3.0	0.2	11.0	20.4	28.2
Australia	146.4	78.0	81.7	68.5	61.2



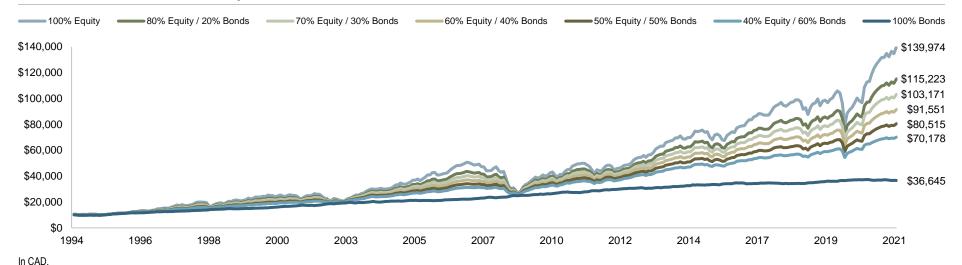
## Impact of Diversification

As of December 31, 2021

These indices 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 <sup>1</sup>
100% Equity	5.83	24.07	16.88	10.87	12.19	12.02
80% Equity/20% Bonds	4.54	18.57	14.40	9.41	10.70	9.80
70% Equity/30% Bonds	3.88	15.87	13.04	8.61	9.88	8.67
60% Equity/40% Bonds	3.22	13.23	11.64	7.75	9.00	7.54
50% Equity/50% Bonds	2.55	10.64	10.17	6.85	8.07	6.42
40% Equity/60% Bonds	1.88	8.10	8.65	5.89	7.08	5.31
100% Bonds	-0.84	-1.93	1.76	1.41	2.34	1.94

## Growth of Wealth: The Relationship Between Risk and Return



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.

Diversification does not eliminate the risk of market loss. For illustrative purposes only. Past performance is no guarantee of future results. 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. 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. Backtested performance results assume the reinvestment of dividends and capital gains. The performance reflects the growth of a hypothetical \$10,000. Assumes all models have been rebalanced monthly. See appendix for allocation information. See "Sources and Descriptions of Data" in the appendix for descriptions of Dimensional Index data. 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.

## Three Crucial Lessons for Weathering the Stock Market's Storm

Second Quarter 2022

Marlena Lee, PhD
Global Head of Investment Solutions

Investors can always expect uncertainty. While volatile periods like the one we're experiencing now can be intense, investors who learn to embrace uncertainty may often triumph in the long run. Reacting to down markets is a good way to derail progress made toward reaching your financial goals.

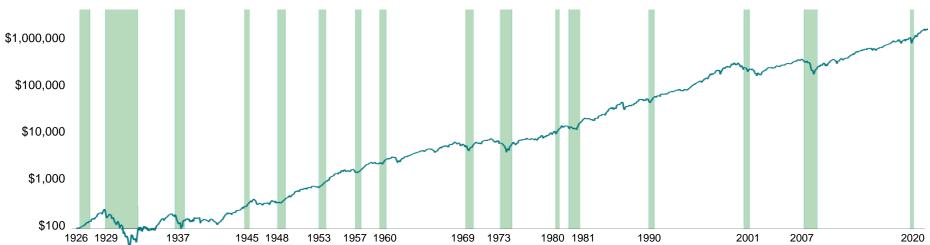
Here are three lessons to keep in mind during periods of volatility that can help you stick to your well-built plan. And if you don't have a plan, there's a suggestion for that too.

### 1. A recession is not a reason to sell

Are we headed into a recession? A century of economic cycles teaches us we may well be in one before economists make that call.

But one of the best predictors of the economy is the stock market itself. Markets tend to fall in advance of recessions and start climbing earlier than the economy does. As the below shows, returns have often been positive while in a recession.





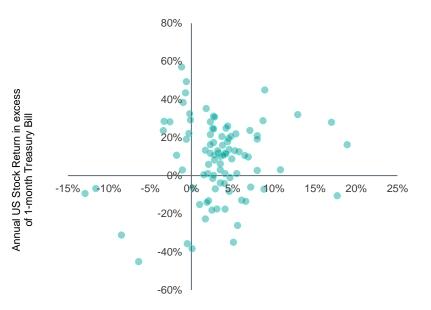
### Past performance is no guarantee of future results.

In US dollars. Recessions shaded in green. Stock returns represented by Fama/French Total US Market Research Index, provided by Ken French and available at mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\_library.html. This value-weighed US market index is constructed every month, using all issues listed on the NYSE, AMEX, or Nasdaq with available outstanding shares and valid prices for that month and the month before. Exclusions: American depositary receipts. Sources: CRSP for value-weighted US market return. Rebalancing: Monthly. Dividends: Reinvested in the paying company until the portfolio is rebalanced. Growth of wealth shows the growth of a hypothetical investment of \$100 in the securities in the Fama/French US Total Market Research Index from July 1926 through December 2021.

## Three Crucial Lessons for Weathering the Stock Market's Storm

(continued from page 16)

All the dots in the upper left quadrant in the chart below are years where the US economy contracted but US stocks still outperformed less-risky Treasury bills. It's a great illustration of the forward-looking nature of markets. If you're worried, other investors are too, and that uncertainty is reflected in stock prices.



Annual Real GDP Growth

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

Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. In USD. Annual GDP growth rates obtained from the US Bureau of Economic Analysis. GDP growth numbers are adjusted to 2012 USD terms to remove the effects of inflation. Data provided by Fama/French. Eugene Fama and Ken French are members of the Board of Directors of the general partner of and provide consulting services to, Dimensional Fund Advisors LP. Please see "Appendix Descriptions" for a description of the Fama/French index data.

Results shown during periods prior to each index's index inception date do not represent actual returns of the respective index. Other periods selected may have different results, including losses. Backtested index performance is hypothetical and is provided for informational purposes only to indicate historical performance had the index been calculated over the relevant time periods. Backtested performance results assume the reinvestment of dividends and capital gains.

Whether accompanied by recessions or not, market downturns can be unsettling. But over the past century, US stocks have averaged positive returns over one-year, three-year, and five-year periods following a steep decline.

A year after the S&P 500 crossed into bear market territory (a 20% fall from the market's previous peak), it rebounded by about 20% on average. And after five years, the S&P 500 averaged returns over 70%.<sup>1</sup>

## Fama/French Total US Market Research Index Returns

July 1, 1926-December 31, 2021



## Past performance is no guarantee of future results.

Market declines or downturns are defined as periods in which the cumulative return from a peak is -10%, -20%, or -30% or lower. Returns are calculated for the 1-, 3-, and 5-year look-ahead periods beginning the day after the respective downturn thresholds of -10%, -20%, or -30% are exceeded. The bar chart shows the average returns for the 1-, 3-, and 5-year periods following the 10%, 20%, and 30% thresholds. For the 10% threshold, there are 29 observations for 1-year look-ahead, 28 observations for 3-year look-ahead, and 27 observations for 5-year look-ahead. For the 20% threshold, there are 15 observations for 1-year look-ahead, 14 observations for 3-year look-ahead, and 13 observations for 5-year look-ahead. For the 30% threshold, there are 7 observations for 1-year look-ahead, 6 observations for 3-year look-ahead, and 6 observations for 5-year look-ahead. Peak is a new all-time high prior to a downturn. Data provided by Fama/French and available at mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\_library.html. Fama/French Total US Market Research Index: 1926–present: Fama/French Total US Market Research Factor and One-Month US Treasury Bills. Source: Ken French website.

## Three Crucial Lessons for Weathering the Stock Market's Storm

(continued from page 17)

We believe that staying invested puts you in the best position to capture the recovery. If you take risk out of your portfolio, it should be a strategic, not tactical, choice. We believe the only good reason to sell out of a stock portfolio now—so long as it's diversified and low-cost—is because you learned something about your risk tolerance or your investment goals have changed.

### 2. Time the market at your peril

When stocks have declined, it might be tempting to sell to stem further losses. You might think, "I'll sit out until things get a bit better." But by the time markets are less volatile, you'll have often missed part of the recovery. Yes, it stings to watch your portfolio shrink, but imagine how you'll feel when it's stuck while the market rebounds.

Big return days are hard to predict, and you really don't want to miss them. If you invested \$1,000 in the S&P 500 continuously from the beginning of 1990 through the end of 2020, you would have \$20,451. If you missed the single best day, you'd only have \$18,329—and only \$12,917 if you missed the best five days.<sup>2</sup>

History shows the stock market tends to rebound quickly. The same can't be said for individual stocks or even entire sectors. (How many railroad stocks do you own?) So, while investing means taking on some risk for expected reward, investors should mitigate risks where they can. Diversification is a top risk mitigation tool, along with investing in fixed income and having a financial plan.

## 3. It may be a good time to reassess your portfolio and your plan

We saw many fads crop up through the pandemic, from baking to puppy adoption. Did you experiment with one of the pandemic investment fads—FAANGs or meme stocks or dogecoin? If so, it may be time to put those fads in the rearview.

Do you know the names of all the stocks you own? Then you probably own too few. How much of your portfolio sits outside the US? Because about half the global market is comprised of foreign stocks. If you only invest in the S&P 500, you're missing half of the investment opportunity set. A market-cap-weighted global portfolio is a better starting point than chasing segments of the market that have outperformed in the past few years.

And if you want to outperform the market, allow decades of academic research to light the way. Portfolios focused on small caps, value stocks, and more profitable companies have had higher returns over the long run. The portfolio I use is invested across more than 10,000 global equities in over 40 countries.

Beyond a well-designed portfolio, one of the best ways to deal with volatile markets and disappointing returns is to have planned for them. A financial advisor can help you develop a plan that bakes in the chances you'll experience some market lows. And they can help you find the confidence to weather the current storm and get to the other side.

A sound approach to investing—through a plan, a well-designed portfolio, and an advisor—is the ultimate self-care during these rough markets. Your future self will thank you.

This piece first appeared in MarketWatch with the title "Follow these 3 crucial lessons for weathering the stock market's storm."

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  Diversification neither assures a profit nor guarantees against loss in a declining market. Past performance is not a guarantee of future results.

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## Appendix





## Dimensional Core Plus Wealth Index Models

Weights (%)

Equity Total	0%	40%	50%	60%	70%	80%	100%
Dimensional Canadian Core Equity Index	0	9	11	13	16	18	22
Dimensional Canadian Vector Equity Index	0	4	5	6	7	8	10
Dimensional US Core Equity Index (Canada)	0	5	7	8	10	11	14
Dimensional US Core Equity Index (Canada) (Hedged to CAD)	0	5	7	8	10	11	14
Dimensional US Vector Equity Index (Canada)	0	5	5	6	6	6	6
Dimensional US Vector Equity Index (Canada) (Hedged to CAD)	0	0	1	1	2	4	6
Dimensional International Core Equity Index (Canada)	0	4	4	5	6	7	9
Dimensional International Core Equity Index (Canada) (Hedged to CAD)	0	4	4	5	6	7	9
Dimensional International Vector Equity Index (Canada)	0	3	3	4	4	4	4
Dimensional International Vector Equity Index (Canada) (Hedged to CAD)	0	0	0	1	2	2	4
S&P Global REIT Index	0	2	2	2	3	3	4
Fixed Income Total	100%	60%	50%	40%	30%	20%	0%
Dimensional Global Short-Term Government Variable Maturity Index (Hedged to CAD)	85	30	23	16	11	6	0
Dimensional Global Adjusted Investment Grade Index (Hedged to CAD)	15	15	15	14	12	9	0
Dimensional Global Targeted Credit Index (Hedged to CAD)	0	15	13	10	8	5	0



## Dimensional Core Plus Wealth Index Models

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Period Returns as of December 31, 2021 (%)

	1 Year	3 Years	5 Years	10 Years
Equity Total				
Dimensional Canadian Core Equity Index	28.43	16.62	8.77	8.28
Dimensional Canadian Vector Equity Index	32.03	17.13	7.97	7.82
Dimensional US Core Equity Index (Canada)	25.51	21.75	15.62	18.55
Dimensional US Core Equity Index (Canada) (Hedged to CAD)	26.02	23.15	15.54	15.30
Dimensional US Vector Equity Index (Canada)	27.72	16.93	10.81	16.59
Dimensional US Vector Equity Index (Canada) (Hedged to CAD)	28.03	17.94	10.52	13.25
Dimensional International Core Equity Index (Canada)	9.69	10.74	8.99	11.01
Dimensional International Core Equity Index (Canada) (Hedged to CAD)	15.68	13.37	9.68	11.20
Dimensional International Vector Equity Index (Canada)	11.00	9.47	8.02	10.81
Dimensional International Vector Equity Index (Canada) (Hedged to CAD)	16.94	11.96	8.64	10.95
S&P Global REIT Index	31.37	11.92	8.11	12.57
Fixed Income Total				
Dimensional Global Short-Term Government Variable Maturity Index (Hedged to CAD)	-2.00	1.06	0.89	1.72
Dimensional Global Adjusted Investment Grade Index (Hedged to CAD)	-1.55	5.75	4.35	5.87
Dimensional Global Targeted Credit Index (Hedged to CAD)	-0.24	4.22	3.13	4.40



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### DIMENSIONAL CORE PLUS 100/0 WEALTH INDEX MODEL (CANADA)

January 1994-Present: Dimensional Core Plus 100/0 Index Model. The index model combines the following indexes: Dimensional Canadian Core Equity Index, Dimensional Canadian Vector Equity Index, Dimensional US Core Equity Index, Dimensional US Vector Equity Index, Dimensional International Core Equity Index, Dimensional International Vector Equity Index, and the S&P Global REIT Index (gross div). 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, Canadian equities are held at 33.33%, then rescaled and rounded to the nearest 1%. The weights of US and International equities are held at their respective market capitalization weights and then rescaled to sum to the total non-REIT, non-Canada weight of the Index Model, rounded to the nearest 1%. Regional weights are determined at each guarter-end and held constant for next three months. Within the Canadian allocation, each month the weights are allocated to the core and vector indexes at 70% and 30%, respectively. Within each of the US and International allocations, each month the weights are allocated to the core, core (hedged to CAD), vector and vector (hedged to CAD) indexes at 35%, 35%, 15% and 15%, respectively. The Index Model returns are calculated monthly as a weighted average of the returns of the underlying indexes. The Dimensional Core Plus 100/0 Index Model has been retrospectively calculated by Dimensional and did not exist prior to March 2020.

### DIMENSIONAL CORE PLUS 80/20 WEALTH INDEX MODEL (CANADA)

January 1994-Present: Dimensional Core Plus 80/20 Index Model: 80% of the weight is allocated to global equity indexes (described below) and 20% of the weight is allocated to the following fixed income indexes: Dimensional Global Short-Term Government Variable Maturity Index (hedged to CAD) (6%), Dimensional Global Adjusted Investment Grade Index (hedged to CAD) (9%), and Dimensional Global Targeted Credit Index (hedged to CAD) (5%). The equity allocation combines the following indexes: Dimensional Canadian Core Equity Index, Dimensional Canadian Vector Equity Index. Dimensional US Core Equity Index. Dimensional US Vector Equity Index, Dimensional International Core Equity Index, Dimensional International Vector Equity Index, and the S&P Global REIT Index (gross div). 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, Canadian equities are held at 33.33%, then rescaled and rounded to the nearest 1%. The weights of US and International equities are held at their respective market capitalization weights and then rescaled to sum to the total non-REIT, non-Canada weight of the Index Model, rounded to the nearest 1%. Regional weights are determined at each quarterend and held constant for next three months. Within the Canadian allocation, each month the weights are allocated to the core and vector indexes at 70% and 30%, respectively. Within each of the US and International allocations, each month the weights are allocated to the core, core (hedged to CAD), vector and vector (hedged to CAD) indexes at 35%, 35%, 18% and 12%, respectively. The Index Model returns are calculated monthly as a weighted average of the returns of the underlying indexes. The Dimensional Core Plus 80/20 Index Model has been retrospectively calculated by Dimensional and did not exist prior to March 2020.

### DIMENSIONAL CORE PLUS 70/30 WEALTH INDEX MODEL (CANADA)

January 1994-Present: Dimensional Core Plus 70/30 Index Model: 70% of the weight is allocated to global equity indexes (described below) and 30% of the weight is allocated to the

following fixed income indexes: Dimensional Global Short-Term Government Variable Maturity Index (hedged to CAD) (10.5%), Dimensional Global Adjusted Investment Grade Index (hedged to CAD) (12%), and Dimensional Global Targeted Credit Index (hedged to CAD) (7.5%). The equity allocation combines the following indexes: Dimensional Canadian Core Equity Index, Dimensional Canadian Vector Equity Index, Dimensional US Core Equity Index, Dimensional US Vector Equity Index, Dimensional International Core Equity Index, Dimensional International Vector Equity Index, and the S&P Global REIT Index (gross div). 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. Canadian equities are held at 33.33%, then rescaled and rounded to the nearest 1%. The weights of US and International equities are held at their respective market capitalization weights and then rescaled to sum to the total non-REIT, non-Canada weight of the Index Model, rounded to the nearest 1%. Regional weights are determined at each guarterend and held constant for next three months. Within the Canadian allocation, each month the weights are allocated to the core and vector indexes at 70% and 30%, respectively. Within each of the US and International allocations, each month the weights are allocated to the core. core (hedged to CAD), vector and vector (hedged to CAD) indexes at 35%, 35%, 18% and 12%, respectively. The Index Model returns are calculated monthly as a weighted average of the returns of the underlying indexes. The Dimensional Core Plus 70/30 Index Model has been retrospectively calculated by Dimensional and did not exist prior to March 2020.

### DIMENSIONAL CORE PLUS 60/40 WEALTH INDEX MODEL (CANADA)

January 1994-Present: Dimensional Core Plus 60/40 Index Model: 60% of the weight is allocated to global equity indexes (described below) and 40% of the weight is allocated to the following fixed income indexes: Dimensional Global Short-Term Government Variable Maturity Index (hedged to CAD) (16%), Dimensional Global Adjusted Investment Grade Index (hedged to CAD) (14%), and Dimensional Global Targeted Credit Index (hedged to CAD) (10%), The equity allocation combines the following indexes: Dimensional Canadian Core Equity Index. Dimensional Canadian Vector Equity Index, Dimensional US Core Equity Index, Dimensional US Vector Equity Index, Dimensional International Core Equity Index, Dimensional International Vector Equity Index, and the S&P Global REIT Index (gross div). 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. Canadian equities are held at 33.33%, then rescaled and rounded to the nearest 1%. The weights of US and International equities are held at their respective market capitalization weights and then rescaled to sum to the total non-REIT, non-Canada weight of the Index Model, rounded to the nearest 1%. Regional weights are determined at each quarterend and held constant for next three months. Within the Canadian allocation, each month the weights are allocated to the core and vector indexes at 70% and 30%, respectively. Within each of the US and International allocations, each month the weights are allocated to the core, core (hedged to CAD), vector and vector (hedged to CAD) indexes at 35%, 35%, 24% and 6%, respectively. The Index Model returns are calculated monthly as a weighted average of the returns of the underlying indexes. The Dimensional Core Plus 60/40 Index Model has been retrospectively calculated by Dimensional and did not exist prior to March 2020.

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 CORE PLUS 50/50 WEALTH INDEX MODEL (CANADA)

January 1994-Present: Dimensional Core Plus 50/50 Index Model: 50% of the weight is allocated to global equity indexes (described below) and 50% of the weight is allocated to the following fixed income indexes: Dimensional Global Short-Term Government Variable Maturity Index (hedged to CAD) (22.5%), Dimensional Global Adjusted Investment Grade Index (hedged to CAD) (15%), and Dimensional Global Targeted Credit Index (hedged to CAD) (12.5%). The equity allocation combines the following indexes: Dimensional Canadian Core Equity Index. Dimensional Canadian Vector Equity Index, Dimensional US Core Equity Index, Dimensional US Vector Equity Index, Dimensional International Core Equity Index, Dimensional International Vector Equity Index, and the S&P Global REIT Index (gross div). 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. Canadian equities are held at 33.33%, then rescaled and rounded to the nearest 1%. The weights of US and International equities are held at their respective market capitalization weights and then rescaled to sum to the total non-REIT, non-Canada weight of the Index Model, rounded to the nearest 1%. Regional weights are determined at each quarter-end and held constant for next three months. Within the Canadian allocation, each month the weights are allocated to the core and vector indexes at 70% and 30%, respectively. Within each of the US and International allocations, each month the weights are allocated to the core, core (hedged to CAD), vector and vector (hedged to CAD) indexes at 35%, 35%, 24% and 6%, respectively. The Index Model returns are calculated monthly as a weighted average of the returns of the underlying indexes. The Dimensional Core Plus 50/50 Index Model has been retrospectively calculated by Dimensional and did not exist prior to March 2020.

### DIMENSIONAL CORE PLUS 40/60 WEALTH INDEX MODEL (CANADA)

January 1994-Present: Dimensional Core Plus 40/60 Index Model: 40% of the weight is allocated to global equity indexes (described below) and 60% of the weight is allocated to the following fixed income indexes: Dimensional Global Short-Term Government Variable Maturity Index (hedged to CAD) (30%), Dimensional Global Adjusted Investment Grade Index (hedged to CAD) (15%), and Dimensional Global Targeted Credit Index (hedged to CAD) (15%). The equity allocation combines the following indexes: Dimensional Canadian Core Equity Index, Dimensional Canadian Vector Equity Index, Dimensional US Core Equity Index, Dimensional US Vector Equity Index, Dimensional International Core Equity Index, Dimensional International Vector Equity Index, and the S&P Global REIT Index (gross div). 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, Canadian equities are held at 33.33%, then rescaled and rounded to the nearest 1%. The weights of US and International equities are held at their respective market capitalization weights and then rescaled to sum to the total non-REIT, non-Canada weight of the Index Model, rounded to the nearest 1%. Regional weights are determined at each quarter-end and held constant for next three months. Within the Canadian allocation, each month the weights are allocated to the core and vector indexes at 70% and 30%, respectively. Within each of the US and International allocations, each month the weights are allocated to the core, core (hedged to CAD), and vector indexes at 35%, 35% and 30%, respectively. The Index Model returns are calculated monthly as a weighted average of the returns of the underlying indexes. The Dimensional Core Plus 40/60 Index Model has been retrospectively calculated by Dimensional and did not exist prior to March 2020.

### DIMENSIONAL CORE PLUS 0/100 WEALTH INDEX MODEL (CANADA)

January 1994-Present: Dimensional Core Plus 0/100 Index Model: Dimensional Global Short-Term Government Variable Maturity Index (hedged to CAD) (85%) and Dimensional Global Adjusted Investment Grade Index (hedged to CAD) (15%). The Index Model returns are calculated monthly as a weighted average of the returns of the underlying indexes. The Dimensional Core Plus 0/100 Index Model has been retrospectively calculated by Dimensional Fund Advisors and did not exist prior to March 2020.

### **DIMENSIONAL CANADIAN CORE EQUITY INDEX**

Compiled by Dimensional from Bloomberg securities data. Targets all the securities in the eligible markets 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 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 monthly returns are computed as the simple average of the monthly returns of four sub-indices, each one reconstituted once a year at the end of each quarter of the year. Maximum index weight of any one company is capped at 10%. The country currently included is Canada. Exclusion: investment companies. The index has been retrospectively calculated by Dimensional and did not exist prior to April 2008. Accordingly, the results shown during the periods prior to April 2008 do not represent actual returns of the index. The calculation methodology for the index was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index. The calculation methodology for the index was amended in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.

### **DIMENSIONAL CANADIAN VECTOR EQUITY INDEX**

Compiled by Dimensional from Bloomberg securities data. Targets all the securities in the eligible markets 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 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 monthly returns are computed as the simple average of the monthly returns of four sub-indices, each one reconstituted once a year at the end of each quarter of the year. Maximum index weight of any one company is capped at 10%. The country currently included is Canada, Exclusions: REITs and investment companies. The index has been retrospectively calculated by Dimensional and did not exist prior to April 2008. Accordingly, the results shown during the periods prior to April 2008 do not represent actual returns of the index. The calculation methodology for the index was amended in January 2014 to include direct profitability as a factor in selecting securities for inclusion in the index. The calculation methodology for the index 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 since trades have not actually been executed, results may have under-or overcompensated for the impact since trades have not actually been executed, results may have under-or overcompensated for the impact since trades have not actually been executed, results may have under-or overcompensated for the impact since trades have not actually been executed, results may have an actually been executed, results may have actually act



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## **DIMENSIONAL US CORE EQUITY INDEX (CANADA)**

January 1975-present: Compiled by Dimensional from CRSP and Compustat data. Targets all the securities in the eligible 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 eligible market is composed of securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdag Global Market, Exclusions; non-US companies, REITs. UITs, and investment companies. The index has been retrospectively calculated by Dimensional and did not exist prior to November 2007. Accordingly, the results shown during the periods prior to November 2007 do not represent actual returns of the index. Other periods selected may have different results, including losses. The calculation methodology for the index was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index. The calculation methodology for the index 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 the securities in the eligible market with an emphasis on companies with smaller capitalization and lower relative price. The eligible market is composed of securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdag Global Market. Exclusions: non-US companies, REITs, UITs, and investment companies.

### DIMENSIONAL US CORE EQUITY INDEX (CANADA) (HEDGED TO CAD)

January 1975-present: Compiled by Dimensional from CRSP and Compustat data. Targets all the securities in the eligible 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 returns are hedged to CAD. The eligible market is composed of securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdag Global Market. Exclusions: non-US companies, REITs, UITs, and investment companies. The index has been retrospectively calculated by Dimensional and did not exist prior to November 2007. Accordingly, the results shown during the periods prior to November 2007 do not represent actual returns of the index. Other periods selected may have different results, including losses. The index monthly returns are computed as the simple average of the monthly returns of 12 sub-indices, each one reconstituted once a year at the end of each month of the year. The index is unmanaged and is not subject to fees and expenses typically associated with managed accounts or investment funds. Investments cannot be made directly in an index. Past performance is no guarantee of future results. The calculation methodology for the index was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index. The calculation methodology for the index 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 the securities in the eligible market with an emphasis on companies with smaller capitalization and lower relative price. The eligible market is composed of securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdaq Global Market.

### **DIMENSIONAL US VECTOR EQUITY INDEX (CANADA)**

January 1975-present: Compiled by Dimensional from CRSP and Compustat data. Targets all the securities in the eligible market, excluding securities with the largest market capitalization and highest relative price. The index emphasizes 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 eligible market is composed of securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdag Global Market, Exclusions; non-US companies, REITs, UITs, and investment companies. The index has been retrospectively calculated by Dimensional and did not exist prior to November 2009. Accordingly, the results shown during the periods prior to November 2009 do not represent actual returns of the index. Other periods selected may have different results, including losses. The index monthly returns are computed as the simple average of the monthly returns of 12 sub-indices, each one reconstituted once a year at the end of each month of the year. The index is unmanaged and is not subject to fees and expenses typically associated with managed accounts or investment funds. Investments cannot be made directly in an index. Past performance is no guarantee of future results. The calculation methodology for the index was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index. The calculation methodology for the index 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 the securities in the eligible market excluding securities with the largest market capitalizations and highest relative price with an emphasis on companies with smaller capitalization and lower relative price. The eligible market is composed of securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdaq Global Market. Exclusions: non-US companies, REITs, UITs, and investment companies.

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, resulted, resulted and not actually been executed, resulted in any 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 US VECTOR EQUITY INDEX (CANADA) (HEDGED TO CAD)

January 1975-present: Compiled by Dimensional from CRSP and Compustat data. Targets all the securities in the eligible market, excluding securities with the largest market capitalization and highest relative price. The index emphasizes 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 returns are hedged to CAD. The eligible market is composed of securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdag Global Market. Exclusions: non-US companies, REITs, UITs, and investment companies. The index has been retrospectively calculated by Dimensional and did not exist prior to November 2009. Accordingly, the results shown during the periods prior to November 2009 do not represent actual returns of the index. Other periods selected may have different results, including losses. The index monthly returns are computed as the simple average of the monthly returns of 12 sub-indices, each one reconstituted once a year at the end of each month of the year. The index is unmanaged and is not subject to fees and expenses typically associated with managed accounts or investment funds. Investments cannot be made directly in an index. Past performance is no guarantee of future results. The calculation methodology for the index was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index. The calculation methodology for the index 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 the securities in the eligible market, excluding securities with the largest market capitalizations and highest relative price with an emphasis on companies with smaller capitalization and lower relative price. The eligible market is composed of securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdag Global Market. Exclusions: non-US companies, REITs, UITs, and investment companies.

### **DIMENSIONAL INTERNATIONAL CORE EQUITY INDEX (CANADA)**

Compiled by Dimensional from Bloomberg securities data. Targets all the securities in the eligible markets 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 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 monthly returns are computed as the simple average of the monthly returns of four sub-indices, each one reconstituted once a year at the end of each quarter of the year. Maximum index weight of any one company is capped at 5%. Countries currently included are Australia, Austria, Belgium, Brazil, Chile, China, Colombia, the Czech Republic, Denmark, Finland, France, Germany, Hong Kong, Hungary, India, Indonesia, Ireland, Israel, Italy, Japan, Korea, Malaysia, Mexico, the Netherlands, New Zealand, Norway, Peru, the Philippines, Poland, Portugal, Russia, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, and the UK. Exclusion: investment companies. The index has been retrospectively calculated by Dimensional and did not exist prior to April 2008. Accordingly, the results shown during the periods prior to April 2008 do not represent actual returns of the index. The calculation methodology for the index was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index. The calculation methodology for the index was amended in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.

### DIMENSIONAL INTERNATIONAL CORE EQUITY INDEX (CANADA) (HEDGED TO CAD)

Compiled by Dimensional from Bloomberg securities data. Targets all the securities in the eligible markets 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 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 returns are hedged to CAD. The index monthly returns are computed as the simple average of the monthly returns of four sub-indices, each one reconstituted once a year at the end of each quarter of the year. Maximum index weight of any one company is capped at 5%. Countries currently included are Australia, Austria, Belgium, Brazil, Chile, China, Colombia, the Czech Republic, Denmark, Finland, France, Germany, Hong Kong, Hungary, India. Indonesia, Ireland, Israel, Italy, Japan, Korea, Malaysia, Mexico, the Netherlands, New Zealand, Norway, Peru, the Philippines, Poland, Portugal, Russia, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, and the UK. Exclusion: investment companies. The index has been retrospectively calculated by Dimensional and did not exist prior to April 2008. Accordingly, the results shown during the periods prior to April 2008 do not represent actual returns of the index. The calculation methodology for the index was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index. The calculation methodology for the index 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.



## **III** Manulife Securities

### DIMENSIONAL INTERNATIONAL VECTOR EQUITY INDEX (CANADA)

Compiled by Dimensional from Bloomberg securities data. Targets all the securities in the eligible markets 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 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 monthly returns are computed as the simple average of the monthly returns of four sub-indices, each one reconstituted once a year at the end of each quarter of the year. Maximum index weight of any one company is capped at 5%. Countries currently included are Australia, Austria, Belgium, Brazil, Chile, China, Colombia, the Czech Republic, Denmark, Finland, France, Germany, Hong Kong, Hungary, India, Indonesia, Ireland, Israel, Italy, Japan, Korea, Malaysia, Mexico, the Netherlands, New Zealand, Norway, Peru, the Philippines, Poland, Portugal, Russia, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, and the UK, Exclusions; REITs and investment companies. The index has been retrospectively calculated by Dimensional and did not exist prior to April 2008. Accordingly, the results shown during the periods prior to April 2008 do not represent actual returns of the index. The calculation methodology for the index was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index. The calculation methodology for the index was amended in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.

### DIMENSIONAL INTERNATIONAL VECTOR EQUITY INDEX (CANADA) (HEDGED TO CAD)

Compiled by Dimensional from Bloomberg securities data. Targets all the securities in the eligible markets 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 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 returns are hedged to CAD. The index monthly returns are computed as the simple average of the monthly returns of four sub-indices, each one reconstituted once a year at the end of each quarter of the year. Maximum index weight of any one company is capped at 5%. Countries currently included are Australia, Austria, Belgium, Brazil, Chile, China, Colombia, the Czech Republic, Denmark, Finland, France, Germany, Hong Kong, Hungary, India, Indonesia, Ireland, Israel, Italy, Japan, Korea, Malaysia, Mexico, the Netherlands, New Zealand, Norway, Peru, the Philippines, Poland, Portugal, Russia, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, and the UK. Exclusions: REITs and investment companies. The index has been retrospectively calculated by Dimensional and did not exist prior to April 2008. Accordingly, the results shown during the periods prior to April 2008 do not represent actual returns of the index. The calculation methodology for the index was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index. The calculation methodology for the index 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 GLOBAL SHORT-TERM GOVERNMENT VARIABLE MATURITY INDEX (HEDGED TO CAD)

Compiled by Dimensional using FTSE data. 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 CAD. Rebalanced monthly. The index has been retroactively calculated by Dimensional and did not exist prior to January 2019.

### DIMENSIONAL GLOBAL ADJUSTED INVESTMENT GRADE INDEX (HEDGED TO CAD)

February 1999–present: Compiled by Dimensional using data provided by Bloomberg. Based on securities in the universe of Bloomberg Global Aggregate Index, and includes global investment grade government bonds and global investment grade corporate bonds. Eligible currencies: AUD, CAD, CHF, EUR, GBP, JPY, and USD. 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 CAD. Rebalanced monthly. Prior to February 1999: Bloomberg Global Aggregate Index (Hedged to CAD). The index has been retroactively calculated by Dimensional and did not exist prior to January 2018.

### DIMENSIONAL GLOBAL TARGETED CREDIT INDEX (HEDGED TO CAD)

January 2003–present: Compiled by Dimensional using data provided by Bloomberg. Based on securities in the universe of Bloomberg Global Aggregate Index and Global High Yield Index, and includes global investment grade corporate bonds and global BB corporates only. Eligible currencies: AUD, CAD, CHF, EUR, GBP, JPY, and USD. 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 CAD. Rebalanced monthly. Prior to January 2003: Bloomberg US Credit 1–3 Year Index (Hedged to CAD). The index has been retroactively calculated by Dimensional and did not exist prior to January 2020.

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 that 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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