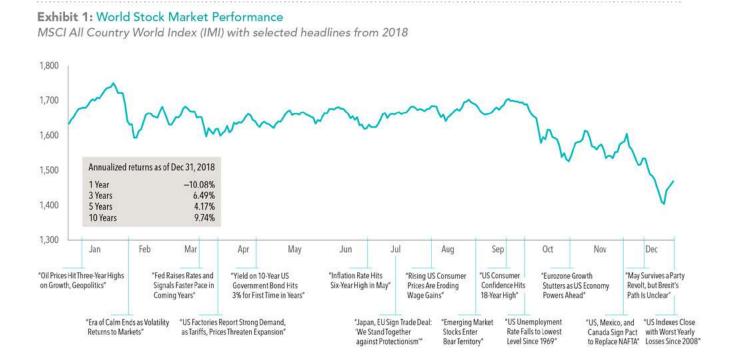
2018: Market Review

After logging strong returns in 2017, global equity markets delivered negative returns in Canadian dollar terms in 2018. Common news stories in 2018 included reports on global economic growth, corporate earnings, record low unemployment in the US, the implementation of Brexit, US trade wars with China and other countries, and a flattening US Treasury yield curve. Global equity markets delivered positive returns through September, followed by a decline in the fourth quarter.

Exhibit 1 highlights some of the year's prominent headlines in the context of global stock market performance as measured by the MSCI All Country World Index (IMI). 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.



Source: MSCI. Past performance is not a guarantee of future results. In US dollars, net dividends. Index is not available for direct investment. Performance does not reflect the expenses associated with management of an actual portfolio.

GLOBAL EQUITIES: VOLATILITY AND UNCERTAINTY ARE BACK

The 4th quarter of 2018 produced higher levels of volatility, especially in October and December. Most equitybased asset classes were firmly in "correction territory of -10% or more". On Christmas Eve (as shown below by Exhibit 2), most major global markets briefly entered bear market conditions of -20% from the earlier high of the year. Since that market low, equity markets have increased 6 to 9%.

Exhibit 2: Market declines from Peak to trough during 2018.

Equity Market	December 24th, 2018	Peak Date
TSX (Canadian Market)	-16%	July 9, 2018
S&P 500 (US Market)	-20%	Sept 17, 2018
EAFE (Europe & Far East)	-24%	Jan 26, 2018
Emerging Markets	-26%	Jan 26, 2018

After declines of 10% or more, equity returns over the subsequent 12 months have been positive 71% of the time in US markets and 72% of the time in other developed markets.

Exhibit 3 shows the performance of markets subsequent to declines of 10%, 20%, and 30%. For each decline threshold, returns are shown for US large cap, non-US developed markets large cap, and emerging markets large cap stocks in the following 12-month period. While declines in equity markets may cause investor concern, the data provides evidence that markets generally have positive returns after a decline.

Exhibit 3: Average Compound Returns for Stocks in a Following 12-Month Period

Market Decline Cutoff	US Large Caps	Non-US Developed Markets Large Caps	Emerging Markets Large Caps
10%	11.25%	11.18%	13.51%
20%	11.61%	14.44%	21.52%
30%	14.31%	19.07%	30.05%

¹ Declines are defined as points in time, measured monthly, when the market's return since the prior market maximum has declined by at least 10%. Declines after December 2017 are not included, but subsequent 12-month returns can include 2018 returns. Compound returns are computed for the 12 months after each decline observed and averaged across all declines for the cutoff. US markets (1926–2018) are represented by the S&P 500 and Developed ex US markets (1970–2018) are represented by the MSCI World ex USA Index.

BONDS HIT A WALL

Global bond yields continued to rise throughout 2018, with many central banks introducing rate hikes in their local markets. Rising rates are ultimately good for investors, as they will eventually lead to higher yields and returns. However, the journey from lower rates to higher rates may produce negative total bond returns over the short term. Bonds were in negative territory for much of the year until Q4 when bonds rallied and equity uncertainty increased.

Exhibit 4: 2018 Asset Class Returns (as of December 31st, 2018)

The table below includes 2018, three-, five-, and ten-year historical returns for major asset classes.

2018 Asset Class Returns ² (in CAD dollars)	YTD	3 yr.	5 yr.	10 yr.
Cash and equivalents	1.30%	0.80%	0.77%	0.74%
Short Term Canadian bonds	1.91%	1.00%	1.73%	2.51%
Canadian Bond Universe	1.41%	1.86%	3.54%	4.16%
Canadian stocks	-8.89%	6.37%	4.06%	7.92%
US stocks	3.85%	8.76%	14.08%	14.43%
International stocks	-6.37%	2.41%	5.70%	7.55%
Emerging market stocks	-7.22%	8.75%	6.88%	9.27%
Global real estate	2.20%	1.79%	10.70%	11.32%
Canadian Dollar vs USD (annualized)	-5.16%	0.59%	-4.58%	-0.87%
Canadian to US Dollar Dec 31st 2018	Dec 31, 2017	Dec 31, 2015	Dec 31, 2013	Dec 31, 2008
0.7	4 0.78	0.73	0.94	0.81

² These index returns are from: Canadian One-Month T-Bills, FTSE TMX Canada Short-Term Bond Index, FTSE TMX Canada Universe Bond Index, S&P/TSX Composite Index, S&P 500 Index, MSCI EAFE Index (net dividend), MSCI Emerging Market Index (net dividend) and S&P Global REIT Index (net dividend). Indices are not available for direct investment and performance does not reflect expenses of an actual portfolio.

2018 VALUE & SMALL COMPANY EFFECTS

The Dimensional Core equity strategies are considered market-based portfolios with tilts to value and small companies. These factors are included in client portfolios with the goal of increasing long-term portfolio returns over market only returns. Factor returns are not straight-line averages. Over time they move in and out of favour and cannot be timed successfully as to when to get in and out of them. Maintaining long-term factor exposure is key to securing success.

The table below includes November 30th YTD, (latest available information) three, five-, ten-, twenty- and twenty-five-year historical premiums or additional returns for global small and value companies over global market returns.

Exhibit 5: Value and Small Company Effects (as of November 30th, 2018)

Value & Small Company Effects (premiums over market returns) ³	YTD	3 yr.	5 yr.	10 yr.	20 yr.	25 yr.
Global small companies (over market)	-5.53%	-1.10%	-1.57%	1.85%	3.39%	1.78%
Global value companies (over market)	-5.50%	-0.74%	-1.79%	-0.16%	1.39%	1.29%

³ Information available as of October 31st 2018. Market returns represented by Dimensional Global Market Index, Global small companies represented by Dimensional Global Small Index and Global value companies represented by Dimensional Global Market-wide Value Index

2018 TMA MODEL PORTFOLIO RETURNS³

The table below lists various TMA portfolio allocations using Dimensional Fund Advisor asset class strategies and their respective annual returns from 2006 to 2018. In every year since 2009, (except 2011) markets and diversified portfolios have produced robust and positive results. Over this 13-year period, investors have experienced positive results in 70% of the calendar years- on par with long-term capital market returns. Since 1970, market returns have been positive for 75% of the years.

Exhibit 6: 2018 TMA Model Portfolio Returns (as of December 31st, 2018)

Date	30% Equity 70% Bonds	50% Equity 50% Bonds	60% Equity 40% Bonds	65% Equity 35% Bonds	75% Equity 25% Bonds	100% Equity	
2006	7.75%	11.22%	13.09%	13.92%	15.81%	20.40%	
2007	1.53%	-0.24%	-1.14%	-1.57%	-2.24%	-4.53%	
2008	-7.15%	-14.15%	-17.53%	-19.16%	-22.41%	-30.11%	
2009	10.34%	14.51%	16.57%	17.64%	19.69%	25.08%	
2010	7.96%	9.86%	10.70%	11.21%	12.03%	14.24%	
2011	0.89%	-1.19%	-3.41%	-4.05%	-5.53%	-9.06%	
2012	7.70%	9.11%	9.87%	10.18%	10.93%	12.60%	
2013	7.29%	12.46%	15.10%	16.47%	19.19%	26.12%	
2014	5.45%	6.57%	7.05%	7.38%	7.86%	9.15%	
2015	3.08%	3.92%	4.46%	4.59%	5.12%	5.99%	
2016	5.66%	8.02%	9.03%	9.71%	10.72%	13.68%	
2017	4.87%	7.24%	8.55%	9.09%	10.42%	13.54%	
2018	-1.49%	-3.13%	-3.97%	-4.38%	-5.22%	-7.35%	

2018 TMA Model Portfolio Returns⁴

Summary Statistics (December 31 2005 to Dec 31st 2018)

Annualized Return	4.08%	4.67%	4.93%	5.07%	5.31%	5.85%
Growth of \$1	\$1.69	\$1.82	\$1.88	\$1.91	\$1.97	\$2.11
Standard Deviation	3.66%	5.77%	6.89%	7.45%	8.59%	11.44%

⁴ Actual client portfolios may differ due to slightly different asset allocations. Model portfolio returns are before TMA management fees but after Dimensional Fund Advisor management fees.

REFLECTIONS: WHAT CAN WE OBSERVE OVER THIS 13-YEAR PERIOD?

Our investment philosophy determines how we manage client portfolios. It is an investment approach that is built on principles and supported by evidence, data and results. It keeps us grounded, stops us from chasing, reduces our fears and concerns, and prepares us all for the long term. However, no philosophy can be 100% perfect and right all the time.

Our philosophy uses a diversified portfolio and will usually have, by its very nature, something that might not be working as well as one should hope. Over time, however, every principle that makes up our philosophy will be an added source of value to your portfolio over the long term. Consistently utilizing each of these principles within the investment philosophy over long periods of time (ten to twenty plus years) will be beneficial to you.

We are thrilled that the vast majority of principles within our investment approach has performed strongly over the last 13 years. During this period, the principles that make up our investment philosophy have worked in your best interest in the following ways:

- 1. Global diversification has worked and produced improved returns for our clients
 - a. Exposure to US companies has been extremely beneficial
 - b. Exposure to companies in international & emerging markets has been beneficial
- 2. Exposure to small companies has been beneficial
- 3. Our buy, hold and rebalance (with no market timing) has outperformed tactical and extremely active strategies such as hedge funds
- 4. Index and passively-managed asset classes have outperformed local activelymanaged funds in Canadian and all global asset classes.

Over the last 13-year period, the following factor within our investment philosophy has not been in favour:

1. Value company factor

It is common for principles in a diversified portfolio to pass in and out of favor; it's part of the reasoning behind being diversified in the first place. Even though global value underperformed relative to the broad market, the other principles of our philosophy were in favour and helped drive returns. Having a majority of the principles add returns over a 13-year period is a big deal, and we feel fortunate to have had that many themes be in favour for such an extended period.

Compare the last decade or so to the years between 2000 and 2010 and you will see a very different outcome. Global value companies had significant additional returns (2.69% annualized over markets during this period). However, US large companies were detrimental to Canadian investors during the "US lost decade" (-9.2% annualized vs. Canadian companies over this period).

Whatever the next year, five years, or ten years hold in store, we have a philosophy and plan that ensure you are prepared for whatever comes your way. As your guides, we embrace the opportunity to work with you and help you protect and grow your investments.

We look forward to seeing and speaking with you soon. In the meantime, should you have any questions, please do not hesitate to contact us. We are always here to answer your questions and address your needs.

On behalf of all of us at Tulett, Matthews & Associates, we wish you a happy and healthy 2019.