TD Wealth

Oxygen

Monthly Perspectives | Portfolio Advice & Investment Research

May 2017

In this issue

Oxygen .... 2 - 4

Core portolios: the base of a successful journey 5

Bonds, the right mix of passive and active strategies 6

Monthly market review 7

Important information 8

On top of the world

The first two climbers to reach the summit of Mount Everest were New Zealander Sir Edmund Hillary and Nepalese Tenzig Norgay on May 29, 1953. This began a long and successful tradition of enlisting a professional with the skills and knowledge required to guide climbers safely up and down the mountain; analogous to the advisor/client relationship at TD Wealth.

This document is for distribution to Canadian clients only.
Please refer to the last page of this report for important information.

TD

Oxygen

Brad Simpson, Chief Wealth Strategist, TD Wealth

Reaching the summit of Mount Everest is considered one of the great achievements that a human being can accomplish while still having both feet on this planet. While there are numerous elements and challenges in getting to the top of the world's highest peak, perhaps the biggest determinant between success and failure is the decision whether to use, or not use, oxygen. This debate is remarkably similar to the active versus passive investment discussion that surrounds portfolio management today and strikes at the heart of the shortcomings of the use of either/or arguments in both fields. However, the conversation should not be a "with or without" proposition and instead, it should be a decision based on when and how much.

If you are skilled and fortunate enough, your journey to reach the top of the mountain will take about two months. Along the way, there will be dangers, some of which include harsh winds, extreme temperatures, unpredictable avalanches and hidden crevasses that climbers can fall into at any time. To complete this challenge, climbers must pass through the Khumbu Icefall and traverse the Lhotse Face, which is essentially a wall of ice. Climbers must also cross the Geneva Spur to reach the South Col, which stands at 26,000 feet and is the last major camp before they make their summit push. Up to this point, the climb can be treacherous, but manageable. Between here and the summit at 29,029 feet, nature kicks it up a notch. In addition to exhaustion, climbers now have to deal with the fact that with every step, the oxygen they breathe becomes increasingly thinner, potentially resulting in very dire consequences. This part of the climb is aptly named the "death zone" for a good reason.

Air, whether at the summit of Mount Everest or at sea level, contains about 21 percent oxygen. But at high altitudes, the density of air changes and it is not nearly as rich in oxygen as the air found at sea level; consequently, oxygen deprivation becomes a big challenge. With each step, the air gets thinner and a myriad of physical and mental conditions begin to set in. The heart rate begins to increase and the blood thickens, increasing the possibility of clotting or strokes. Both actions are the body's way of combating oxygen deprivation, also known as hypoxia. Thin air also challenges mental capacity. As climber and altitude expert Charles S. Houston explained in his book Everest: Mountain Without Mercy, climbers can get high-altitude cerebral edema (HACE), which weakens the higher functions of the brain, such as judgment, perception and will resulting in many high-altitude tragedies. This lack of oxygen puts climbers in danger by impairing them near the summit of Everest, where clear thinking is most critical.

The best way to combat this need for thicker air is to use bottled oxygen. Think of it as a way of utilizing human ingenuity to actively manage the challenge and reduce the risk while endeavouring to reach a goal. Despite its usefulness, oxygen remains one of the most controversial aspects of climbing Everest. Critics consider the need to use supplemental oxygen akin to blood doping or steroid use. Frankly, this debate seems ridiculous. Between 1921 to 2016, 282 people have died climbing the mountain. Those who argue that the use of oxygen somehow diminishes the feat are ignoring a simple fact: there is no passive way to the top; climbers are actively utilizing human ingenuity on every step of the way.

Let us begin with the extreme weather. Among primates, humans are unique in having nearly naked skin, and to compensate, climbers utilize a multitude of gear when tackling Everest. Visit any mountain equipment store for five minutes and you will get the basic idea. To name a few human made necessities for the journey, a climber needs a back pack, an alpine ice axe, crampons and carabineers, a helmet, and a harness with a belay loop. To traverse the Khumbu Icefall, climbers utilize ropes and ladders. Fixed ropes are also used to get across Lhotse Face. And, as previously mentioned, to manage the risks associated in reaching the summit, Oxygen is utilized at the end.

In many ways, the oxygen versus no oxygen debate reminds me of the same discussions in my own profession between active and passive money management. Financial markets are akin to the weather and the terrain of the mountain and passive money management is like going up the mountain with little gear and no oxygen. Active management is akin to using gear where needed including oxygen. The success of reaching the summit with or without oxygen is not an either/or proposition. Instead, it is utilizing the best of nature and human ingenuity in unison to achieve a goal.

The oxygen versus no oxygen debate in mountaineering is extremely balanced with most holding a view that a fusion between nature and human ingenuity is the best approach. The same is true in the professional investment community when it comes to passive versus active money management. For individual investors, however, the debate appears to be one-sided primarily for two reasons:

1. The explosive growth in assets under management by ETFs over the last decade (figure 3)
2. The considerable outperformance of passive over active managers when compared to their index benchmarks over the same time period

The above reasons are on the same side of the coin and are self-reinforcing. Thanks to years of unprecedented and increasingly aggressive central bank intervention (see figure 1, which shows the relentless decline of 10-year U.S. Treasuries) fundamental approaches to fair value calculations in most asset classes found in global financial markets have borne limited fruit on a relative basis. Easy credit has propped up fiscally irresponsible borrowers and prolonged the life of questionable operators and their defective companies. As written in the past, monetary policy has pushed the value of most financial assets to rarefied air (or in this case thin air). It's like the U.S Federal Reserve is an omnipresent force able to part

Oxygen (cont'd)

Brad Simpson, Chief Wealth Strategist, TD Wealth

the clouds and use its giant hand to push the peak of Everest to sea level. As a result, financial markets are just one big canister of oxygen and volatility is nonexistent (figure 2). In a world like this, the wind never threatens instead it sweetly calls out to investors to breathe deep because the peak is just ahead. Take off your climbing gear and run.

Far too often the risk side of the equation is lost in popular investment culture. The vehicle, may it be an ETF, mutual fund or a separately managed account becomes the risk, not the underlying investment itself. It is akin to worrying about the object and ignoring the component parts. Back in the early 1990s (a time when mutual funds really found their way into popular investment culture) we repeatedly, and alarmingly, heard investors say: "I would never invest in the stock market, I invest in mutual funds" only to find upon review that their mutual fund was an equity mutual fund. We believe this is happening again with ETFs.

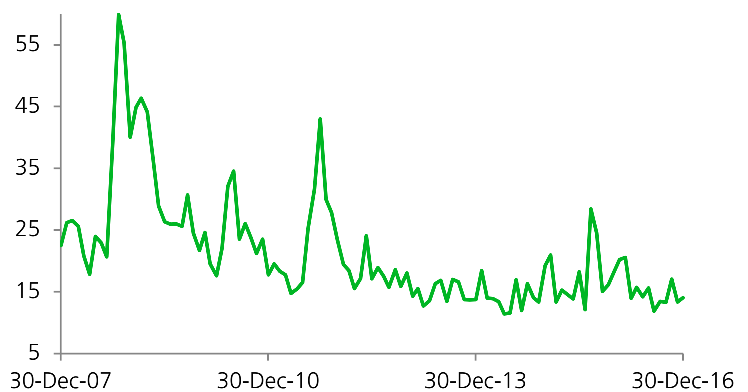
Every year, Natixis Global Asset Management does a survey of individual investors (as well as financial advisors and institutions). Their 2016 Global Survey of Individual Investors offers a look inside the expectations of 7,100 investors in 22 countries. Based on the feedback of this survey, there appears to be numerous misconceptions about passive investments, particularly when it comes to the management of risk. Six of ten individual investors say passive investments are less risky and the same number think they are better for minimizing losses. This lack of understanding has been noticed by advisors as well. According to the Natixis 2016 Global Survey of Financial Advisors, two-thirds of advisors worldwide believe investors have a false sense of security about passive investments. About the same number of advisors report investors are unaware of the risks associated with passive investments—that they are committed to following the market down. While passive strategies present the potential for lower risk, often at a low cost, they typically have no inherent risk management. Nearly three of four (71%) advisors worldwide say investors are unaware passive strategies expose them to the same headline risks (environmental, social, and governance factors) that active strategies face. By overlooking risk management, investors may be ignoring a range of factors–and other investment strategies–that could help them build a more balanced, goal-oriented portfolio.

To be clear, we do not intend to dissuade investors from using passive strategies, we frequently utilize them across our investment platform at TD Wealth. Pay for what you get is one of our core principles. Fees impact returns and consequently, receiving value in terms of risk and returns for higher cost is critical. We use active management for assets that tend to have limited liquidity (ability to get money in and out). A good example of this would be private fixed income investments. For instance, inside the TD Canadian Core Plus Bond Fund there is an allocation to private debt. These bonds are not publicly traded and are not included in fixed income indices.

Figure 1: U.S. 10-Year Government Bond Yields

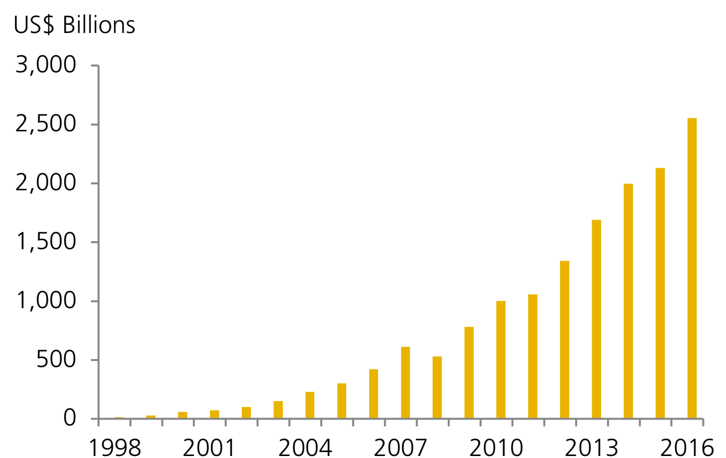
Source: Bloomberg Finance L.P. As at December 30, 2016.

Figure 2: Chicago Board Options Exchange (CBOE) Volatility Index



Source: Bloomberg Finance L.P. As at December 30, 2016.

Figure 3: U.S. Equity ETF Assets



Source: Morningstar®. Figures exclude obsolete funds. As at December 30, 2016.

Oxygen (cont'd)

Brad Simpson, Chief Wealth Strategist, TD Wealth

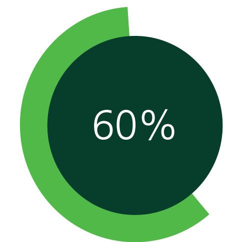
For accredited investors wanting absolute returns with income, we use the RP Debt Opportunities Fund, which is a long/short global investment-grade credit strategy that seeks to generate strong, tax efficient returns in all interest rate and credit markets. Importantly, the fund's focus is on low volatility and capital preservation.

Active management is also utilized to gain exposure to small and medium sized equity investments. A good example of this is the TD U.S. Mid-Cap Growth Fund managed by T. Rowe Price Associates. This investment seeks to achieve long-term capital growth by investing primarily in equity securities of medium sized issuers in the United States. More complex strategies also tend to be actively managed. The TD Retirement Portfolios, for instance, would be nearly impossible to replicate with a passive approach. Within this strategy, put options are added as a form of protection, effectively creating a "floor" for the equity investments held in the portfolio. This provides a risk reduction strategy seeking to limit overall portfolio volatility and the potential to better protect capital from significant market downturns. For accredited investors seeking absolute returns, the CC&L Global Market Neutral Fund and the Polar Long/Short equity strategy are both good examples of quality actively managed investments that are more complex in their construction. Both are designed to provide positive risk adjusted returns with low correlation to equity markets by hedging risks.

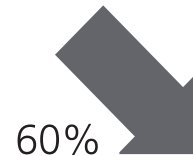
Correspondingly, we are inclined to use passive investments that tend to be more liquid, larger in size and less complex. For instance, a number of portfolios at TD Wealth gain basic exposure to fixed income risk factors via an allocation to the iShares 1-5 Year Laddered Government Bond Index ETF. In some portfolios, there is direct exposure to the equity risk factor in the form of the 500 largest companies in the United States, via the SPDR S&P 500 ETF. A similar approach is taken with the use of iShares S&P/TSX 60 ETF, which seeks long-term capital appreciation by investing in the largest Canadian companies by market capitalization.

When Edmund Hillary and Tenzig became the first two climbers to reach the summit of Mount Everest on May 29, 1953, they did so as part of a giant expeditionary force; it was a team effort. They also utilized the most modern technology of the time to do so, including the use of oxygen. The following quote from Hillary is telling: "We didn't know if it was humanly possible to reach the top of Mount Everest. And even using oxygen as we were, if we did get to the top, we weren't at all sure whether we wouldn't drop dead or something of that nature." The world has changed dramatically since that time, as have the tools climbers use today to accomplish the same feat. The same is true in the profession of managing money, which is why we believe that it is so important to innovate and look forward. We believe a critical component to investment success is the relentless pursuit of being prepared for what comes next. Grand distortions caused by recent years of unorthodox monetary policy may mean that the era of simply optimizing past data to calibrate future allocations is over. We believe investors are better served by directing their efforts to what they can control: building a robust portfolio that can withstand the inevitable volatility and unknown elements of financial markets. Our asset allocation process and our commitment to risk factor diversification naturally lends itself to the usage of both active and passive investments. This is not a matter of better or worse, it is about how to best use both to construct and manage portfolios. The balance between the two is determined after a deep discovery of a client's behaviour around risk, their wants and needs combined with a thorough assessment of the economic environment in which we are managing. Everyone has a different route to the summit. At TD Wealth, we know that there is a broad range of potential outcomes because the environment in which we climb is ever changing. It is crucial for investors to retain a long-term perspective, be mindful of the crevices in their thinking, maximize diversification benefits within their portfolios and utilize both active and passive investment strategies.

Figure 4: Investors Globally are Confused About the Benefits of Passive Investing

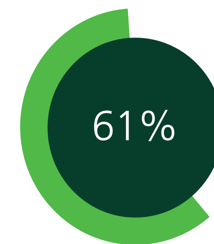


Believe index funds are less risky



60%

Believe index funds can help minimize losses



Believe index funds offer better diversification

Source: Natixis Global Asset Management 2016 Global Survey of Individual Investors.

Core portolios: the base of a successful journey

Chris Blake, CFA, MBA, Senior Portfolio Manager

What is a core portfolio?

A core equity portfolio is a set of equities that form a solid base of a well-diversified portfolio. Generally, equities are selected to provide market like returns using what is almost a buy and hold strategy. A core could consist of a single exchange traded fund (ETF) or a combination of actively managed equities, such as the TD Core Equity portfolios. The goal of constructing a core portfolio is to create a group of equities that provide stable, long-term returns. While an ETF that mirrors a well-known index could be an effective way to achieve that goal, a group of well-managed equities can work as well, if not better, than the ETF by producing returns that are similar yet less volatile than the index.

Selecting equities starts here

The first thing to consider is diversification. Although it does not prevent potential losses, diversification does help reduce risks in your portfolio so that it can help achieve your long-term financial goals more effectively. But not all diversified portfolios are created equally. There are some key considerations to ensure that adequate diversity in a portfolio is achieved. First and foremost, an assortment of equities is required. Furthermore, just as you would not put all your money into a single asset class such as bonds, equities or gold, you should not invest in one security within each asset class either. A single stock portfolio carries a lot of risk; just think of what happened to once seemingly strong companies such as Nortel Networks Corp. or Valeant Pharmaceuticals International, Inc. Simply put, risk is reduced as more and different equities are added. There is no clear cut answer to the question of how many equities are required for proper diversification. Famous investment theorist Benjamin Graham suggested between 10 and 30 would provide adequate diversification to reduce the impact of any individual holding on the portfolio to a level that would provide similar risk as the overall market.

Second, because we are creating a buy and hold portfolio, it is important to recognize that market sectors will perform differently at different stages of the economic cycle. As such, it is wise to establish diversity across industries as well. Since we are looking to create a "set it and forget it" type portfolio, we need representation from each sector, ideally with some diversity within the sectors as well. Within most indices, there are eleven commonly recognized economic sectors broken down by Global Industry Classification Standard, or GICS.

It's all about balance

Next, one needs to consider the balance of the GICS sectors in the portfolio. And just like portfolios, not all indices are created equal. Over time, it becomes apparent to investors that the U.S. S&P 500 Index (S&P 500) produces vastly different performance than its Canadian counterpart, the S&P/TSX Composite Index (S&P/TSX). One of the biggest sources of that variation is the difference in the weighting of the various GICS sectors (see table 1). Sectors with a high degree of economic sensitivity and higher volatility, such as materials and energy, are more prominent in the S&P/TSX, where combined these sectors represent 33.4% of the index compared to just 9.2% in the S&P 500—more than three times the weight. This high concentration in a single sector causes the Canadian index to swing more widely than the more balanced S&P 500. The S&P/TSX is also almost two and a half times as heavy in the financial sector compared to the S&P 500 but has just 40% of its exposure to the combined consumers segments (staples and discretionary).

Table 1: GICS Sector Weights

GICS Sector	S&P 500	S&P/TSX
Energy	6.3%	21.4%
Materials	2.9%	12.0%
Industrials	10.2%	9.1%
Consumer Discretionary	12.5%	5.3%
Consumer Staples	9.3%	3.9%
Health Care	14.0%	0.6%
Financials	14.1%	33.8%
Information Technology	22.5%	2.9%
Telecommunications Services	2.3%	5.0%
Utilities	3.2%	3.0%
Real Estate	2.9%	3.0%
	100%	100%

Source: TD Securities Inc. As at April 28, 2017.

We believe that having an actively optimized core portfolio that includes U.S. and Canadian equities provides better balance and diversification compared to holding a single product representing an index. The ability to recognize and act on opportunities that arise in certain segments of the market is one of the advantages the Core Equity Portfolios offer. For example, some segments of the market have better opportunities in Canada, while other sectors, such as health care, information technology and the consumer sectors have far more choice and opportunity in the U.S.

Once a solid foundation is built by selecting a core portfolio, fine tuning your exposure can be accomplished by adding satellite positions to gain access to a wider variety of markets, such as European equity, Emerging Markets or small capitalisation companies. In aggregate, the blend of different exposures with an active core should provide your total equity portfolio with better volatility and return characteristics than holding a single, passive index.

Bonds, the right mix of passive and active strategies

Sheldon Dong, CFA, Fixed Income Strategist

Bonds are as different from stocks as apples are from oranges. Trying to compare them is fruitless, but together they are important ingredients that contribute to healthy investment portfolios. Just as in well-balanced diets, different financial instruments offer different nutritional elements to an investment portfolio. The key is having an understanding of their characteristics, the benefits they provide and finding the right mix. As each investor has a unique set of goals, real-world constraints and risk preferences, there is no one right way to invest for everyone. In the passive/active management debate, there are appropriate situations and circumstances for both approaches when it comes to fixed income.

Bonds can be the ultimate passive investment in a portfolio, with the most important attribute being precise cash flows that can help with financial planning. After all, a bond is essentially a long term loan, where an investor receives regular interest payments and a return of the principal invested at a future date when the bond matures. If a bond is held to the maturity date, the exact amount of income generated and the dates of the payments can easily be determined. This is why bonds are commonly used in retirement planning, often using a laddered maturity strategy based on when and how much an investor would like to receive cash flows. A well laddered portfolio of individual bonds is generally used to provide precise monthly streams of income, which offer a margin of safety and some peace of mind for investors working towards their longer term goals. As this is a passive strategy, credit quality is essential, with most investors using government-guaranteed bonds for safety. While this passive approach has worked well for investors over the past few decades, the current historically low interest rate environment is making things more difficult for investors to achieve their investment goals using bonds. They need either more principal to invest in, or be able to take on a higher degree of risk to obtain higher interest rates. As Government of Canada bonds currently yield 1.0% for a 5-year maturity and 1.47% for 10 years (as of April 20, 2017), many investors have been forced to take on more risk, which require a more active management strategy.

To obtain higher interest rates, bond investors have moved to accept more credit risk through corporate bonds. Corporate yields are necessarily higher relative to government guarantees, because there is less security for investors. While a solid portfolio can be constructed using high quality corporate bonds, company fortunes can change and it is difficult for individuals to obtain good diversification of risks, which is why investing in this segment favours an active management approach. Active management becomes more important as investors move down in credit quality into non-investment-grade or emerging market bonds to obtain better interest rates. Relative to strong federal government bonds, higher yields are also a gauge of risk. Income generation is an important long-term goal for most investors, but with the outlook for interest rates remaining at historic lows (TD Economics) makes an actively managed lower quality segment of a bond portfolio an essential element to generate income.

As we all know predicting the future is impossible, a margin of safety is one of the most under appreciated forces in investing. This portion of a bond portfolio lends itself to a passive investment strategy as credit quality is high and requires less monitoring. Passive is cheaper. First and foremost, some active strategies simply cost too much. Those costs drag down returns and contribute to often poor and unpredictable performance. There is no disputing that passive strategies typically have lower fees and have often done a good job of beating below-average active managers. Bonds are a bit different, as an actively managed strategy focused on credit over time does provide investors with higher rates of return, net of fees. In the passive/active management debate, investors may need to consider that the solution does not have to be one (apple) or the other (orange) but instead, a blend of the two, which may provide a more fruitful solution.

Table 2: Interest Rate Outlook

	Annual Average						End of Period					
	2016	2017F	2018F	2019F	2020F	2021F	2016	2017F	2018F	2019F	2020F	2021F
U.S. Fixed Income												
Fed Funds Target Rate (%)*	0.55	1.30	1.90	2.50	2.75	2.75	0.75	1.50	2.25	2.75	2.75	2.75
3-mth T-Bill Rate (%)	0.30	1.20	1.80	2.40	2.65	2.65	0.51	1.40	2.15	2.65	2.65	2.65
2-yr Gov't Bond Yield (%)	0.80	1.60	2.35	2.75	2.85	2.85	1.20	1.95	2.55	2.85	2.85	2.85
5-yr Gov't Bond Yield (%)	1.30	2.25	2.95	3.15	3.15	3.15	1.93	2.55	3.05	3.15	3.15	3.15
10-yr Gov't Bond Yield (%)	1.85	2.55	3.20	3.40	3.45	3.45	2.45	2.80	3.30	3.45	3.45	3.45
10-yr - 2-yr Gov't Spread (%)	1.05	0.95	0.85	0.65	0.60	0.60	1.25	0.85	0.75	0.60	0.60	0.60
Canadian Fixed Income												
Overnight Target Rate (%)	0.50	0.50	0.75	1.25	1.75	2.25	0.50	0.50	1.00	1.50	2.00	2.50
3-mth T-Bill Rate (%)	0.50	0.55	0.80	1.30	1.80	2.30	0.46	0.55	1.00	1.50	2.00	2.50
2-yr Gov't Bond Yield (%)	0.60	0.85	1.35	1.90	2.35	2.65	0.74	0.95	1.55	2.05	2.55	2.65
5-yr Gov't Bond Yield (%)	0.75	1.35	2.10	2.55	2.90	2.95	1.11	1.65	2.30	2.70	2.95	2.95
10-yr Gov't Bond Yield (%)	1.25	1.85	2.50	2.90	3.20	3.25	1.72	2.10	2.65	3.05	3.25	3.25
10-yr - 2-yr Gov't Spread (%)	0.65	1.00	1.15	1.00	0.85	0.60	0.98	1.15	1.10	1.00	0.70	0.60

*Upper bound of target range. F: Forecast by TD Economics, May 2017. Annual averages are the average of the four quarterly end-of-period forecasts.
Source: Statistics Canada, Bank of Canada, Bloomberg Finance L.P.

Monthly market review

		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Canadian Indices ($CA) Return	Index Level	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	20 Years
S&P/TSX Composite (TR)	50,918	0.44	2.00	2.86	14.92	5.13	8.06	4.53	7.39
S&P/TSX Composite (PR)	15,586	0.25	1.30	1.95	11.72	2.08	4.86	1.51	4.91
S&P/TSX 60 (TR)	2,427	0.58	1.78	3.03	15.97	6.25	8.85	4.79	7.74
S&P/TSX SmallCap (TR)	1,001	-2.06	-1.14	-0.62	12.88	1.26	3.75	1.16	-
U.S. Indices ($US) Return	Index Level	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	20 Years
S&P 500 (TR)	4,585	1.03	5.16	7.16	17.92	10.47	13.68	7.15	7.60
S&P 500 (PR)	2,384	0.91	4.62	6.49	15.44	8.17	11.27	4.87	5.60
Dow Jones Industrial (PR)	20,941	1.34	5.42	5.96	17.82	8.09	9.65	4.83	5.62
NASDAQ Composite (PR)	6,048	2.30	7.71	12.34	26.64	13.70	14.70	9.13	8.16
Russell 2000 (TR)	6,826	1.10	3.18	3.59	25.63	9.03	12.95	7.05	8.71
U.S. Indices ($CA) Return	Index Level	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	20 Years
S&P 500 (TR)	6,265	3.62	10.29	9.06	28.41	18.92	21.28	9.44	7.48
S&P 500 (PR)	3,258	3.50	9.73	8.38	25.71	16.43	18.71	7.10	5.49
Dow Jones Industrial (PR)	28,615	3.95	10.56	7.84	28.30	16.35	16.98	7.07	5.51
NASDAQ Composite (PR)	8,264	4.93	12.96	14.34	37.91	22.39	22.37	11.45	8.04
Russell 2000 (TR)	9,327	3.69	8.22	5.43	36.80	17.37	20.51	9.33	8.59
MSCI Indices ($US) Total Return	Index Level	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	20 Years
World	7,440	1.53	5.58	8.16	15.30	6.27	10.56	4.51	6.46
EAFE (Europe, Australasia, Far East)	7,136	2.62	7.09	10.20	11.83	1.32	7.27	1.34	5.15
EM (Emerging Markets)	2,086	2.21	8.03	13.95	19.58	2.16	1.85	2.81	5.98
MSCI Indices ($CA) Total Return	Index Level	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	20 Years
World	10,167	4.14	10.73	10.08	25.56	14.39	17.96	6.74	6.34
EAFE (Europe, Australasia, Far East)	9,752	5.25	12.31	12.16	21.77	9.07	14.45	3.50	5.03
EM (Emerging Markets)	2,851	4.84	13.30	15.97	30.22	9.97	8.67	5.00	5.86
Currency	Level	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	20 Years
Canadian Dollar ($US/$CA)	73.18	-2.50	-4.65	-1.75	-8.17	-7.10	-6.27	-2.09	0.11
Regional Indices (Native Currency) Price Return	Index Level	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	20 Years
London FTSE 100 (UK)	7,204	-1.62	1.48	0.86	15.41	2.04	4.66	1.11	0.02
Hang Seng (Hong Kong)	24,615	2.09	5.37	11.88	16.84	3.61	3.14	1.94	3.28
Nikkei 225 (Japan)	19,197	1.52	0.82	0.43	15.18	10.30	15.06	0.99	0.01
Benchmark Bond Yields		3 Month		5 Year		10 Year		30 Year	
Government of Canada Yields		0.52		1.03		1.58		2.18	
U.S. Treasury Yields		0.80		1.82		2.30		2.97	

Canadian Bond Indices ($CA) Total Return	Index Level	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years
FTSE TMX Canada Universe Bond Index	1019.81	0.96	0.33	0.83	1.89	3.89	3.37	4.75
FTSE TMX Canadian Short Term Bond Index (1-5 Years)	703.88	0.40	0.86	1.07	1.80	2.14	2.32	3.56
FTSE TMX Canadian Mid Term Bond Index (5-10)	1141.16	1.40	2.70	0.38	3.43	4.86	4.38	5.76
FTSE TMX Long Term Bond Index (10+ Years)	1669.05	2.92	5.72	4.85	4.41	7.32	5.40	6.70

Sources: TD Securities Inc., Bloomberg Finance L.P. TR: total return, PR: price return. As at April 28, 2017.

Important information

The information contained herein has been provided by TD Wealth and is for information purposes only. The information has been drawn from sources believed to be reliable. Graphs and charts are used for illustrative purposes only and do not reflect future values or future performance of any investment. The information does not provide financial, legal, tax or investment advice. Particular investment, tax, or trading strategies should be evaluated relative to each individual's objectives and risk tolerance.

Certain statements in this document may contain forward-looking statements ("FLS") that are predictive in nature and may include words such as "expects", "anticipates", "intends", "believes", "estimates" and similar forward-looking expressions or negative versions thereof. FLS are based on current expectations and projections about future general economic, political and relevant market factors, such as interest and foreign exchange rates, equity and capital markets, the general business environment, assuming no changes to tax or other laws or government regulation or catastrophic events. Expectations and projections about future events are inherently subject to risks and uncertainties, which may be unforeseeable. Such expectations and projections may be incorrect in the future. FLS are not guarantees of future performance. Actual events could differ materially from those expressed or implied in any FLS. A number of important factors including those factors set out above can contribute to these digressions. You should avoid placing any reliance on FLS.

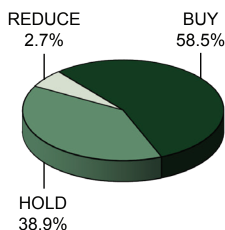
All credit products are subject to credit approval and various terms and conditions. Nothing contained herein should be construed as an offer or commitment to lend by the Toronto-Dominion Bank.

Full disclosures for all companies covered by TD Securities Inc. can be viewed at https://www.tdsresearch.com/equities/welcome.important.disclosure.action

Research Ratings

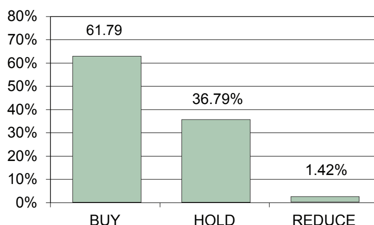
Overall Risk Rating in order of increasing risk: Low (7.8% of coverage universe), Medium (37.7%), High (43.1%), Speculative (11.4%)

Distribution of Research Ratings



Percentage of subject companies under each rating category—BUY (covering Action List BUY, BUY and Spec. BUY ratings), HOLD and REDUCE (covering TENDER and REDUCE ratings).
As at May 1, 2017.

Investment Services Provided



Percentage of subject companies within each of the three categories (BUY, HOLD and REDUCE) for which TD Securities Inc. has provided investment banking services within the last 12 months.
As at May 1, 2017.

Action List BUY: The stock's total return is expected to exceed a minimum of 15%, on a risk-adjusted basis, over the next 12 months and it is a top pick in the Analyst's sector. BUY: The stock's total return is expected to exceed a minimum of 15%, on a risk-adjusted basis, over the next 12 months. SPECULATIVE BUY: The stock's total return is expected to exceed 30% over the next 12 months; however, there is material event risk associated with the investment that could result in significant loss. HOLD: The stock's total return is expected to be between 0% and 15%, on a risk-adjusted basis, over the next 12 months. TENDER: Investors are advised to tender their shares to a specific offer for the company's securities. REDUCE: The stock's total return is expected to be negative over the next 12 months.

Research Report Dissemination Policy: TD Waterhouse Canada Inc. makes its research products available in electronic format. These research products are posted to our proprietary websites for all eligible clients to access by password and we distribute the information to our sales personnel who then may distribute it to their retail clients under the appropriate circumstances either by e-mail, fax or regular mail. No recipient may pass on to any other person, or reproduce by any means, the information contained in this report without our prior written consent.

Analyst Certification:The Portfolio Advice and Investment Research analyst(s) responsible for this report hereby certify that (i) the recommendations and technical opinions expressed in the research report accurately reflect the personal views of the analyst(s) about any and all of the securities or issuers discussed herein, and (ii) no part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the provision of specific recommendations or views expressed by the research analyst in the research report.

Conflicts of Interest: The Portfolio Advice & Investment Research analyst(s) responsible for this report may own securities of the issuer(s) discussed in this report. As with most other employees, the analyst(s) who prepared this report are compensated based upon (among other factors) the overall profitability of TD Waterhouse Canada Inc. and its affiliates, which includes the overall profitability of investment banking services, however TD Waterhouse Canada Inc. does not compensate its analysts based on specific investment banking transactions.

Mutual Fund Disclosure: Commissions, trailing commissions, performance fees, management fees and expenses all may be associated with mutual fund investments. Please read the prospectus, which contains detailed investment information, before investing. The indicated rates of return (other than for each money market fund) are the historical annual compounded total returns for the period indicated including changes in unit value and reinvestment of distributions. The indicated rate of return for each money market fund is an annualized historical yield based on the seven-day period ended as indicated and annualized in the case of effective yield by compounding the seven day return and does not represent an actual one year return. The indicated rates of return do not take into account sales, redemption, distribution or optional charges or income taxes payable by any unitholder that would have reduced returns. Mutual funds are not covered by the Canada Deposit Insurance Corporation or by any other government deposit insurer and are not guaranteed or insured. Their values change frequently. There can be no assurances that a money market fund will be able to maintain its net asset value per unit at a constant amount or that the full amount of your investment will be returned to you. Past performance may not be repeated.

Corporate Disclosure: TD Wealth represents the products and services offered by TD Waterhouse Canada Inc. (Member – Canadian Investor Protection Fund), TD Waterhouse Private Investment Counsel Inc., TD Wealth Private Banking (offered by The Toronto-Dominion Bank) and TD Wealth Private Trust (offered by The Canada Trust Company).

The Portfolio Advice and Investment Research team is part of TD Waterhouse Canada Inc., a subsidiary of The Toronto-Dominion Bank.

Trade-mark Disclosures: FTSE TMX Global Debt Capital Markets Inc. 2016 "FTSE®" is a trade mark of FTSE International Ltd and is used under licence. "TMX" is a trade mark of TSX Inc. and is used under licence. All rights in the FTSE TMX Global Debt Capital Markets Inc.'s indices and / or FTSE TMX Global Debt Capital Markets Inc.'s ratings vest in FTSE TMX Global Debt Capital Markets Inc. and/or its licensors. Neither FTSE TMX Global Debt Capital Markets Inc. nor its licensors accept any liability for any errors or omissions in such indices and / or ratings or underlying data. No further distribution of FTSE TMX Global Debt Capital Markets Inc.'s data is permitted without FTSE TMX Global Debt Capital Markets Inc.'s express written consent.

Bloomberg and Bloomberg.com are trademarks and service marks of Bloomberg Finance L.P., a Delaware limited partnership, or its subsidiaries. All rights reserved.

TD Securities is a trade-mark of The Toronto-Dominion Bank representing TD Securities Inc., TD Securities (USA) LLC, TD Securities Limited and certain corporate and investment banking activities of The Toronto-Dominion Bank.

®©2017 Morningstar is a registered mark of Morningstar Research Inc. All rights reserved.

All trademarks are the property of their respective owners.

®The TD logo and other trade-marks are the property of
The Toronto-Dominion Bank.