The Importance of Active Portfolio Management
Risk Management in an Evolving Market Environment

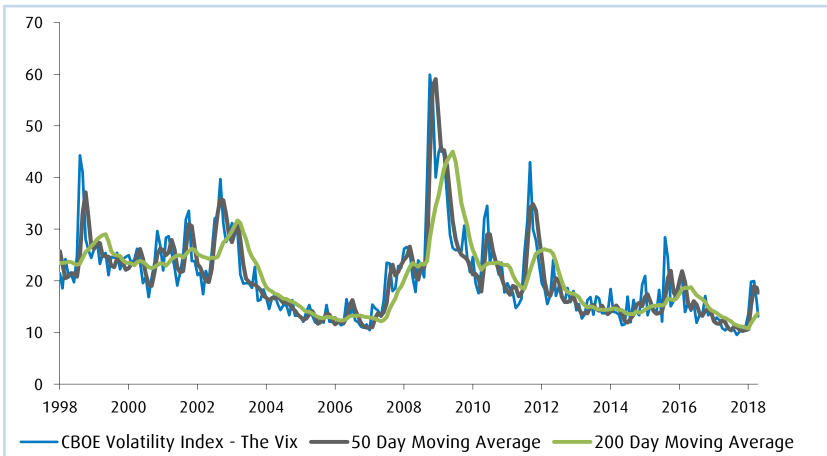
Stéphane Rochon, CFA, Equity Strategist
Richard Belley, CFA, Fixed Income Strategist

Stock volatility has increased substantially so far in 2018, and understandably, this roller coaster feeling has made investors nervous. At times like these, the BMO Nesbitt Burns Portfolio Advisory Team believes a historical perspective is helpful. **Figure 1** shows market volatility as represented by the Chicago Board Options Exchange ("CBOE") Market Volatility Index. Even with the spike we have seen, stock volatility is not particularly elevated relative to the last 20 years, and recent market action is not "abnormal" when taking a longer-term view. In fact, we believe that last year's market behaviour was the real outlier, as volatility kept declining to historically low levels, which were symptomatic of investor complacency.

Despite the strength in oil and other commodities, and a robust Canadian economy, the S&P/TSX Composite Index ("S&P/TSX") has significantly underperformed the U.S. market, as represented by the S&P 500, since the start of 2017 (**Figure 2**). We see this as a disconnect, since Canada typically does well later in the cycle, particularly as inflationary pressures start building and 10-year interest rates begin to rise (our market is highly levered to "real assets"). This is clearly the case right now when looking at prices paid by manufacturers and for wages. We believe Trump's threat to "rip-up" the North American Free Trade Agreement ("NAFTA") was a major factor in this lagging performance. However, with a resolution to the impasse seemingly closer, we think there is a performance catch-up opportunity for high quality Canadian stocks, certainly in the Energy space but also in other sectors such as Financials and Basic Materials.

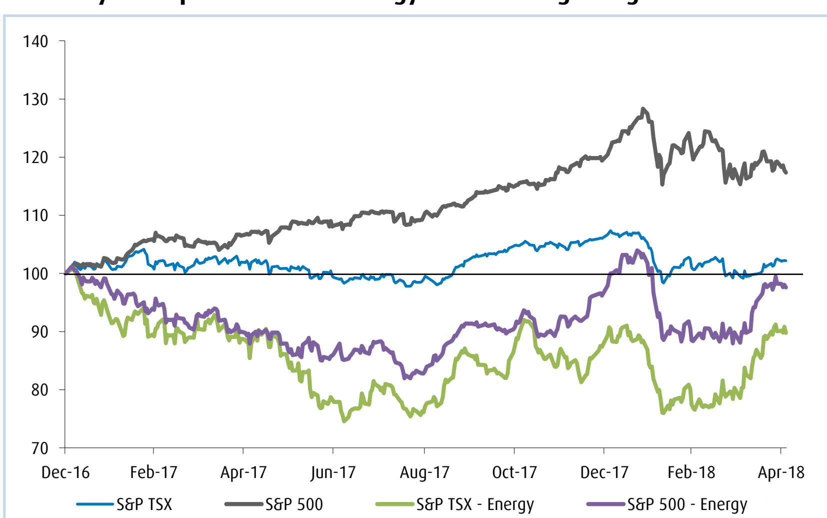
This view is backed up by our historical work which shows that over the last 25 years, the S&P/TSX actually outperformed the S&P 500 when the Consumer Price Index was rising (8.3% versus 5.5% annualized). The Canadian Basic Materials, Energy and Financials sectors had average annual returns of 13%, 14% and 10%, respectively, in this environment.

Figure 1: Historical Levels of Volatility



Source: Factset

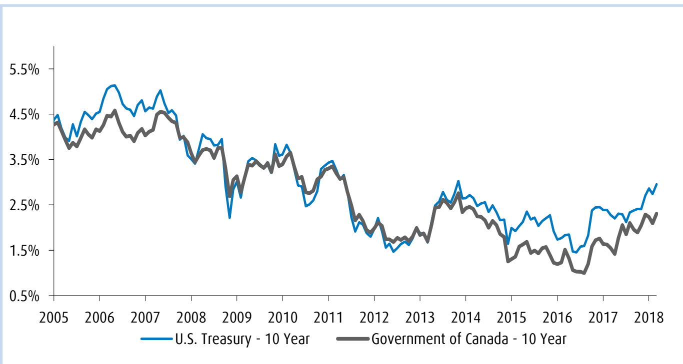
Figure 2: The TSX Has Badly Underperformed the S&P 500 and Canadian Energy has Badly Underperformed U.S. Energy since the Beginning of 2017



Source: Factset

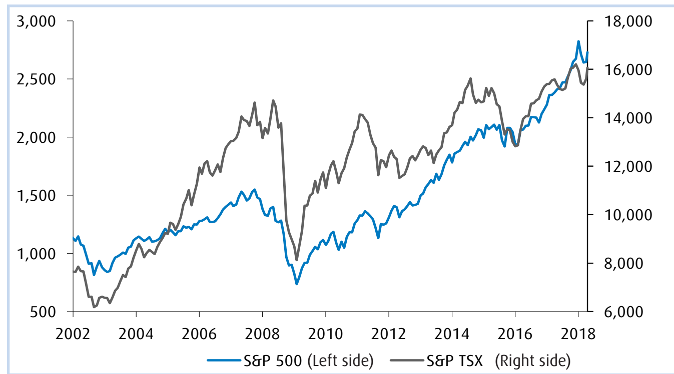
The point of this prelude is to underline the fact that global economies and markets often move in volatile and unpredictable fashion. When this happens, it is human nature to fear further losses when the market undergoes a correction. It is never a good idea to sell stocks in a panic or to exceed a normal cash allocation for fear of rising interest rates (**Figure 3**), as this tends to undermine the long-term performance (**Figure 4**) of portfolios. Remaining focused on long-term goals – through a diversified portfolio across asset classes and geographies – and the market's ability to recover over the long-run is the best course of action. As **Figure 5** illustrates, over the years there has been a rotation of performance leaders which underlines the importance of both portfolio risk management and diversification. Effective diversification helps control the volatility of portfolios when certain assets move up, as others are going down. For example, bonds tend to do well when the stock market sells off, thus reducing the ups and downs that typically lead to overly emotional reactions on the part of investors.

Figure 3: Canadian and U.S. 10-Year Government Bonds Yields



Source: Factset

Figure 4: Canadian and U.S. Equity Markets



Source: Factset

Figure 5: Leader's Rotation—Asset Classes Performances 2005-2017

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Emerging Market Equities 31.17	Emerging Market Equities 32.08	Emerging Market Equities 18.55	Global Fixed Income 31.07	Canadian Small Cap 84.22	Canadian Small Cap 40.53	Canadian Fixed Income 9.67	Global High Yield 16.17	US Small Cap 48.14	U.S. Large Cap 23.93	U.S. Large Cap 21.59	Canadian Small Cap 36.39	Emerging Market Equities 28.70
Canadian Large Cap 24.13	International Equities 26.37	Canadian Large Cap 9.83	EM Sov. Local Currency Debt 18.55	Emerging Market Equities 52.03	US Small Cap 20.24	Global Fixed Income 8.26	Emerging Market Equities 16.00	Global Small Cap 41.84	Global Equities 15.01	Global Small Cap 20.07	Canadian Large Cap 21.08	International Equities 17.36
Canadian Small Cap 19.68	Canadian Small Cap 21.65	Canadian Fixed Income 3.68	Canadian Fixed Income 6.42	Canadian Large Cap 35.05	Global Small Cap 19.97	Global High Yield 6.10	Global Small Cap 15.53	U.S. Large Cap 41.27	US Small Cap 14.35	Global Equities 19.55	US Small Cap 17.11	Global Small Cap 15.09
Global Small Cap 13.17	Global Equities 20.19	Canadian Small Cap 1.01	Global High Yield -6.77	Global High Yield 28.86	Canadian Large Cap 17.61	U.S. Large Cap 4.64	International Equities 15.29	Global Equities 35.91	Global Small Cap 11.54	International Equities 19.46	Global Small Cap 9.33	Global Equities 14.99
International Equities 11.16	US Small Cap 17.92	EM Sov. Local Currency Debt 0.17	US Small Cap -17.18	Global Small Cap 22.92	Emerging Market Equities 12.98	EM Sov. Local Currency Debt 0.68	EM Sov. Local Currency Debt 14.17	International Equities 31.57	Canadian Large Cap 10.55	Global Fixed Income 16.15	Global High Yield 8.93	U.S. Large Cap 13.83
Global Equities 7.27	Canadian Large Cap 17.26	International Equities -5.32	U.S. Large Cap -21.20	International Equities 12.49	EM Sov. Local Currency Debt 9.64	US Small Cap -1.80	Global Equities 13.96	Global High Yield 14.35	Global Fixed Income 9.65	Global High Yield 16.03	U.S. Large Cap 8.09	Canadian Large Cap 9.10
Canadian Fixed Income 6.46	Global Small Cap 17.11	Global Fixed Income -7.00	Global Equities -25.37	Global Equities 11.07	U.S. Large Cap 9.06	Global Equities -2.67	US Small Cap 13.77	Canadian Large Cap 12.99	Global High Yield 9.64	US Small Cap 14.64	Emerging Market Equities 7.74	EM Sov. Local Currency Debt 7.64
EM Sov. Local Currency Debt 3.61	U.S. Large Cap 15.35	Global Equities -7.08	Global Small Cap -26.95	US Small Cap 8.00	Global High Yield 6.95	Global Small Cap -6.44	U.S. Large Cap 13.43	Canadian Small Cap 8.27	Canadian Fixed Income 8.79	Canadian Fixed Income 3.52	EM Sov. Local Currency Debt 6.14	US Small Cap 7.12
U.S. Large Cap 2.29	EM Sov. Local Currency Debt 14.78	U.S. Large Cap -10.53	International Equities -28.78	U.S. Large Cap 7.39	Canadian Fixed Income 6.74	Canadian Large Cap -8.71	Canadian Large Cap 7.19	Emerging Market Equities 4.29	Emerging Market Equities 7.03	Emerging Market Equities 2.42	Global Equities 4.41	Canadian Small Cap 5.34
US Small Cap 1.94	Global High Yield 12.19	Global High Yield -12.19	Canadian Large Cap -33.00	Canadian Fixed Income 5.41	Global Equities 6.48	International Equities -9.55	Canadian Fixed Income 3.60	Global Fixed Income 3.94	International Equities 4.12	EM Sov. Local Currency Debt 2.04	Canadian Fixed Income 1.66	Global High Yield 2.93
Global High Yield -0.57	Global Fixed Income 6.23	Global Small Cap -14.23	Emerging Market Equities -41.44	EM Sov. Local Currency Debt 3.59	International Equities 2.56	Emerging Market Equities -16.15	Global Fixed Income 2.01	Canadian Fixed Income -1.19	EM Sov. Local Currency Debt 2.78	Canadian Large Cap -8.32	Global Fixed Income -1.45	Canadian Fixed Income 2.52
Global Fixed Income -6.88	Canadian Fixed Income 4.06	US Small Cap -16.52	Canadian Small Cap -53.33	Global Fixed Income -9.19	Global Fixed Income 0.04	Canadian Small Cap -16.71	Canadian Small Cap 1.16	EM Sov. Local Currency Debt -2.87	Canadian Small Cap -0.81	Canadian Small Cap -15.11	International Equities -2.00	Global Fixed Income 0.34

Source: Morningstar Direct

CONTINUED

Managing risk

Investors must have a plan which includes an understanding of objectives and the risks they face in attaining them. This starts with understanding an investor's longer-term income needs (to maintain a certain lifestyle), and then building sufficient assets to achieve these goals. It is very important to build a "safety cushion" which will allow your BMO Nesbitt Burns Investment Advisor to manage longevity, health, and long-term care risks (which are impossible to predict ahead of time).

We believe that above all else, investors should focus on adjusting the level of risk in their portfolios, and this requires decisive selling and buying when warranted (for example, selling a stock even at a loss when the risk/reward proposition becomes unfavourable). Not only will this approach help investors avoid catastrophic drawdowns in very difficult periods (i.e., the 2008 financial crisis), but also increase returns in healthier environments.

From an investment perspective, some of the most important risks to consider include:

- Capital risk resulting from a decline in the market value of a security (equities are particularly vulnerable to this risk, and more recently, bonds in the context of a rising interest rate cycle);
- Volatility of returns due to market fluctuations;
- The loss of purchasing power due to inflation (one of the largest drawbacks to having too high a proportion of cash in portfolios);
- Reinvestment risk resulting in reduced income due to reinvesting in a declining interest rate environment (a major issue for longer-term bonds and preferred shares); and
- Credit risk — the risk that the issuer of a debt security is unable to make timely payment of principal and/or interest.

Currency risk is an added unpredictable factor in foreign investing. However, Canadian investors can benefit from currency fluctuations if the Canadian dollar depreciates relative to the currency of the investment (as has been the case recently). This was also the case for Canadian investors in the U.S. stock market for much of the 1990s.

With any investment there is a trade-off between risk and return. In general, the greater the risk associated with an investment, the greater the potential return. While risk cannot be eliminated, it can be controlled and adjusted. We concede that effective portfolio risk management is easier said than done, but believe it can be achieved through a quarterly portfolio review and, if required, rebalancing the portfolio at the asset, sector and single security level. The traditional "dynamic asset allocation" framework generally involves reducing positions in the best-performing asset class, while adding to positions in underperforming assets to reduce the fluctuation risks and achieve returns that exceed the target benchmark. We believe there is some merit to this approach as controlling position sizes is, after all, a cornerstone of sound risk management, but investors can do better.

Clearly, the first step remains to construct a portfolio that is aligned with each individual's age, risk tolerance, capital growth objective and income needs. However, rather than blindly selling the best performing positions and buying underperformers, our recommendation is to adjust the portfolio periodically to take advantage of long-term secular trends and extreme valuation discrepancies when they present themselves.

Looking at present market circumstances, we believe that fixed income investors are no longer being adequately compensated for both term and credit risk. There are growing risks of compounding losses of purchasing power by keeping an excessive allocation to cash, a relatively expensive asset class in our opinion. Conversely, we believe that equities are the most attractively valued asset class as reflected in **Figure 6**, the BMO Nesbitt Burns Investment Strategy Committee's Recommended Asset Allocation table.

Figure 6: BMO Nesbitt Burns Investment Strategy Committee's Recommended Asset Allocation (%)

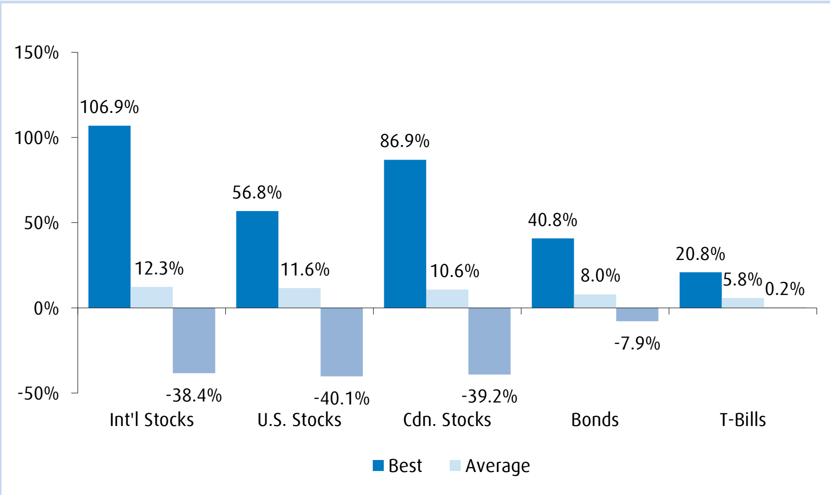
	Income		Balanced		Growth		Aggressive Growth	
	Recommended Asset Mix	Benchmark Weights	Recommended Asset Mix	Benchmark Weights	Recommended Asset Mix	Benchmark Weights	Recommended Asset Mix	Benchmark Weights
Cash	5	5	5	5	5	5	0	5
Fixed Income	70	70	40	45	20	25	5	0
Equity	25	25	55	50	75	70	95	95
Canadian Equity	15	15	25	25	35	35	40	40
U.S. Equity	10	5	25	15	25	20	35	30
EAFE Equity*	0	5	0	5	5	10	10	15
Emerging Equity	0	0	5	5	10	5	10	10

* Within EAFE, we specifically recommend Continental European equity.
Source: BMO Nesbitt Burns Investment Strategy Committee

Portfolio risks and diversification benefits to consider

Figure 7 shows how volatile different asset classes have been since 1960. International stocks, for example, have had the best average annual return at ~12%, but the variance has been tremendous; -38.4% to +106.9%. Conversely, T-Bills have provided the lowest return, but also suffered far less volatility.

Figure 7: Asset Class Returns 1960–2017: 12-Month Total Returns (Rolling Returns)



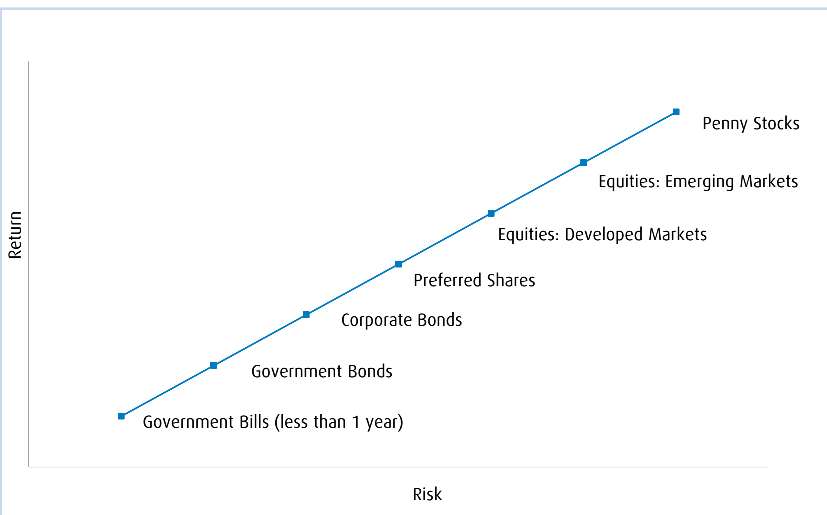
Source: Bloomberg, FTSE TMX, Bank of Canada

Stocks have experienced the most volatile returns and can present a risk of capital loss.

Bonds and T-Bills have provided more stable returns than stocks, but expose investors to the risk of eroding purchasing power due to the impact of inflation (and taxes). These risks can be managed by combining different asset classes in a portfolio.

As shown in **Figure 8**, not all equities are created equal and some are far riskier than others.

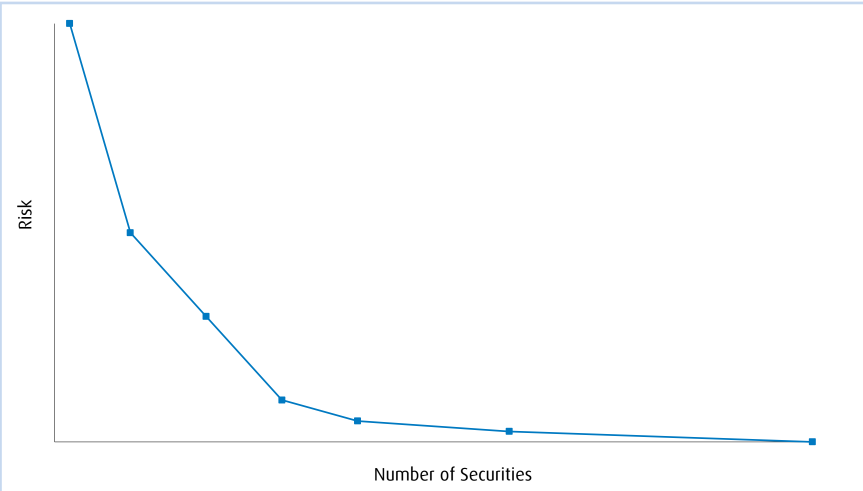
Figure 8: Some Equities are Riskier than Others



Source: BMO Nesbitt Burns Portfolio Advisory Team

Diversification clearly helps reduce an investor's risk. However, as indicated in **Figure 9**, we think it is important to add that over-diversification (i.e., owning too many stocks) takes away a portfolio's ability to outperform the benchmark (e.g., the S&P/TSX or the S&P 500 Index).

Figure 9: Security-Specific Risk Reduction through Portfolio Diversification



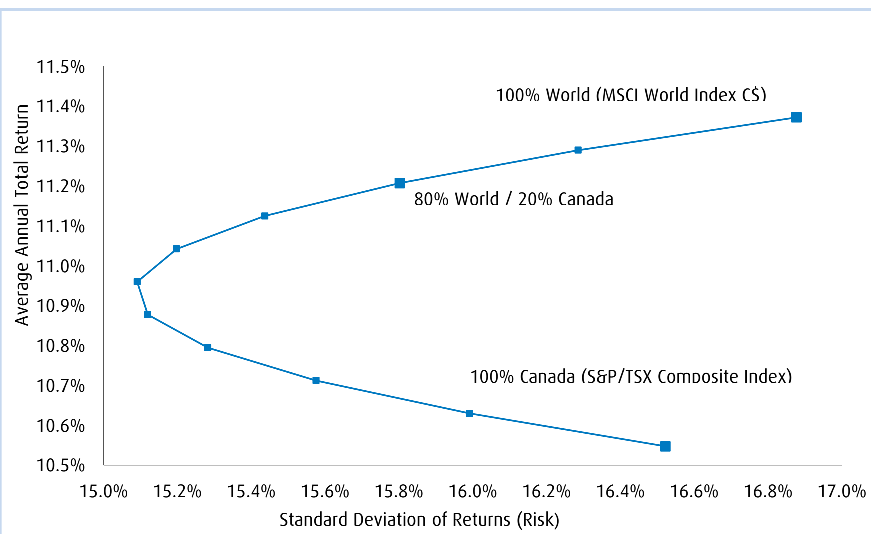
Source: BMO Nesbitt Burns Portfolio Advisory Team

The volatility of a portfolio of stocks decreases as the number of stocks held increases. A well-diversified portfolio can help to reduce security-specific risk (i.e., the risk above that of the market).

For instance, a portfolio of 10 stocks from different industries or sectors will provide better diversification than a portfolio of 10 stocks from one sector of the market.

Modern portfolio studies have demonstrated that return can be increased by adding different investments which are not perfectly correlated (i.e., they do not move in lockstep with existing portfolio holdings), while lowering the overall level of portfolio risk (**Figure 10**). This is one of the rare "free lunches" available in the investment world.

Figure 10: Impact of International Equities for Canadian Investors 1960–2013



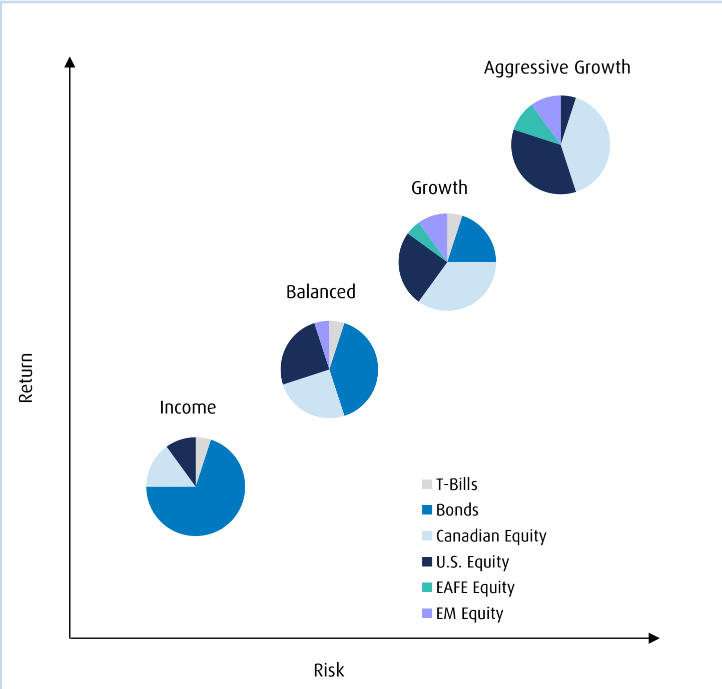
Source: Bloomberg

A combination of roughly 80% of MSCI World Index and 20% of S&P/TSX Composite Index had a lower level of risk than a 100% investment in the S&P/TSX Composite Index, but provided a superior return.

As such, including foreign investments in an equity portfolio can enhance returns and reduce risk.

Putting these concepts together, **Figure 11** shows that a superior risk/reward scenario can be achieved by combining asset classes and diversification.

Figure 11: Asset Classes — Risk versus Return



Source: BMO Nesbitt Burns Portfolio Advisory Team

Risk can be managed with diversification, which can be achieved on a number of levels: by asset class, by investment style, and by security.

In general, the longer the investment time horizon the greater the need for growth. And, the higher the tolerance for risk, the greater the proportion of equity should be in a portfolio.

Conclusion

The true value of an active portfolio management strategy is both the incremental returns it can create for a portfolio, as well as the risk controls it provides. Furthermore, these added risk controls do not have to come at the expense of sacrificing returns. Active management provides investors with the opportunity to take advantage of these market inefficiencies. Over time, a disciplined investment strategy has shown the ability to capitalize on these opportunities, from both an asset allocation and stock selection standpoint.

! Should you have any questions about active portfolio management and our asset allocation recommendations, please contact your BMO Nesbitt Burns Investment Advisor.

BMO Wealth Management
BMO Nesbitt Burns

General Disclosure

Company Specific Disclosures

For Important Disclosures on the stocks discussed in this report, please go to: http://researchglobal.bmocapitalmarkets.com/Public/Company_Disclosure_Public.aspx

The authors of this report (or their household members) directly or beneficially own securities of this issuer: N/A

Ratings and Sector Key

BMO Capital Markets uses the following ratings system definitions:

- OP = Outperform — Forecast to outperform the analyst's coverage universe on a total return basis;
- Mkt = Market Perform — Forecast to perform roughly in line with the analyst's coverage universe on a total return basis;
- Und = Underperform — Forecast to underperform the analyst's coverage universe on a total return basis;
- (S) = speculative investment;
- NR = No rating at this time;
- R = Restricted — Dissemination of research is currently restricted.

Prior BMO Capital Markets Rating System (January 4, 2010 – April 5, 2013):

http://researchglobal.bmocapitalmarkets.com/documents/2013/prior_rating_system.pdf

Other Important Disclosures

For Other Important Disclosures on the stocks discussed in this report, please contact your BMO Nesbitt Burns Investment Advisor or go to http://researchglobal.bmocapitalmarkets.com/Public/Company_Disclosure_Public.aspx or write to Editorial Department, BMO Capital Markets, 3 Times Square, New York, NY 10036 or Editorial Department, BMO Capital Markets, 1 First Canadian Place, Toronto, Ontario, M5X 1H3.

Technical Analysis Disclaimer

Recommendations and opinions contained herein are based on Technical Analysis and do not necessarily reflect fundamental recommendations and opinions and may relate to companies which, in some instances, are not followed on a fundamental research basis.

ID1996 (05/18)