

A Behind the Scenes Look at Algonquin's Asset Allocation Process

For each client engagement, Algonquin's investment process begins with assisting the client in determining their investment objectives. A discovery process guides the Algonquin team in designing an appropriate investment plan. And, it stands to reason, that only with a well thought-out investment plan will the investment relationship have a reasonable chance to succeed. The result of the initial series of discussions is a roadmap detailing the steps which will be taken to implement the investment plan. The plan typically provides an approach that leads to disciplined investment decision making and risk management for each client. It integrates the best of Algonquin's asset management, research and client management skill sets.

This plan typically contains an asset allocation solution that is memorialized in a formal document, the Investment Policy Statement. Simply stated, asset allocation is the process of investing money in different categories of assets — typically stocks, bonds and cash — to provide appropriate diversification based on a client's investment objectives. Ultimately, the objective of an asset allocation plan is to develop an investment portfolio that will help clients reach their financial objectives with a degree of risk they find comfortable. A well-diversified plan will not necessarily outperform the top asset class in any given year, but over time it may be one of the most effective ways to realize long-term goals. Chart 1 below shows the annual performance of major assets classes over a 10+ year period. Note how the returns of the Diversified Portfolio tend to be among the least volatile of the displayed investment choices.

This paper describes the process Algonquin uses to help create investment policy and asset allocation guidelines for each client engagement. Ultimately decisions made during this process are among the most important that the client and Algonquin will make as it lays the groundwork for the long-term management of the portfolio.

Chart 1

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	1H 2016 (6 Month)
Real Estate 42.4%	Natural Resources 41.7%	US Fixed Income 5.2%	Emerging Markets 78.5%	US Small Cap Equity 26.9%	US Fixed Income 7.8%	Real Estate 28.7%	US Small Cap Equity 38.8%	Real Estate 15.9%	US Large Cap Equity 0.9%	Natural Resources 16.9%
Emerging Markets 32.2%	Emerging Markets 39.4%	Cash 2.1%	Real Estate 38.6%	Real Estate 20.4%	US Large Cap Equity 1.5%	Emerging Markets 18.2%	US Large Cap Equity 33.1%	US Large Cap Equity 13.2%	US Fixed Income 0.6%	Real Estate 9.4%
Natural Resources 29.8%	Int'l Equity 11.2%	Hedge Funds -21.4%	Natural Resources 36.1%	Emerging Markets 18.9%	Cash 0.1%	Int'l Equity 17.3%	Int'l Equity 22.8%	US Fixed Income 6.0%	Real Estate 0.1%	Emerging Markets 6.4%
Int'l Equity 26.3%	Diversified Portfolio 10.3	Diversified Portfolio -27.1	Int'l Equity 31.8%	US Large Cap Equity 16.1%	Diversified Portfolio -3.3	US Large Cap Equity 16.4%	Diversified Portfolio 12.8	US Small Cap Equity 4.9%	Cash 0.1%	US Fixed Income 5.3%
US Small Cap Equity 18.4%	Hedge Funds 10.2%	US Small Cap Equity -33.8%	US Large Cap Equity 28.4%	Natural Resources 11.0%	US Small Cap Equity -4.2%	US Small Cap Equity 16.4%	Hedge Funds 9.0%	Diversified Portfolio 3.8	Hedge Funds -0.3%	US Large Cap Equity 3.7%
Diversified Portfolio 16.0	US Fixed Income 7.0%	US Large Cap Equity -37.6%	US Small Cap Equity 27.2%	Diversified Portfolio 10.8	Hedge Funds -5.7%	Diversified Portfolio 11.5	Real Estate 4.4%	Hedge Funds 3.3	Int'l Equity -0.8%	Diversified Portfolio 2.4%
US Large Cap Equity 15.5%	US Large Cap Equity 5.8%	Natural Resources -38.3%	Diversified Portfolio 23.1	Int'l Equity 7.8%	Real Estate -5.8%	Natural Resources 7.2%	Natural Resources 1.5%	Cash 0.0%	Diversified Portfolio -2.2%	US Small Cap Equity 2.2%
Hedge Funds 10.4%	Cash 5.0%	Int'l Equity -43.4%	Hedge Funds 11.5%	US Fixed Income 6.5%	Int'l Equity -12.1%	Hedge Funds 4.8%	Cash 0.1%	Emerging Markets 2.2%	US Small Cap Equity -4.4%	Cash 0.2%
Cash 4.8%	US Small Cap Equity -1.6%	Real Estate -47.7%	US Fixed Income 5.9%	Hedge Funds 5.7%	Natural Resources -14.9%	US Fixed Income 4.2%	US Fixed Income -2.0%	Int'l Equity -4.9%	Emerging Markets -14.9%	Hedge Funds -2.7%
US Fixed Income 4.3%	Real Estate -7.0%	Emerging Markets -53.3%	Cash 0.2%	Cash 0.1%	Emerging Markets -18.4%	Cash 0.1%	Emerging Markets -2.6%	Natural Resources -9.7%	Natural Resources -24.0%	Int'l Equity -4.4%

This example is for illustrative purposes only. The following indices are used as proxies for the asset classes displayed above: ML 3-Month T-Bills (Cash), Barclays Capital Aggregate Bond Composite Index (US Fixed Income), HFRI Fund of Funds Composite Index (Hedge Funds), MSCI Emerging Markets (Emerging Markets), MSCI EAFE (International Equity), FTSE EPRA/NAREIT Developed Real Estate Index (Real Estate), Russell 1000 Index (US Large Cap Equity), Russell 2000 Index (US Small Cap Equity) and S&P Global Natural Resources Index (Natural Resources). The Diversified Portfolio assumes the following weights: 5% ML 3-Month T-Bills, 20% Barclays Capital US Aggregate Bond Index, 25% Russell 3000 Index, 20% MSCI ACWI-ex US, 20% HFRI Fund of Fund Composite Index, 5% FTSE EPRA/NAREIT Developed Index, 5% S&P Global Natural Resources Index.



ALGONQUIN
ADVISORS

Please see Important Disclosure Information at the end of this presentation.

IMPORTANT: The projections or other information generated by Algonquin regarding the likelihood of various outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results.

“Constructing a diversified portfolio is a sophisticated process that is more than just a subjective art form; there is a considerable amount of science that assists Algonquin in preparing appropriate allocations for its clients.”

The strategic allocation will typically include a variety of asset classes to provide appropriate diversification to meet the client’s stated objective. The asset classes may include equities, fixed income, cash, alternatives investments, etc. with target allocation percentages assigned to each class as well as a target range incorporating minimum and maximum allocation percentages for each. This target range affords a degree of flexibility to take advantage of shorter term market movements in an attempt to add return, preserve capital or both. Asset allocation, whether it is long term in nature or more tactical, is a dynamic undertaking and is reviewed for each client over the course of the year. The target allocations and target ranges are not expected to change frequently but should be revisited based on a change in the needs and/or circumstances of the client.

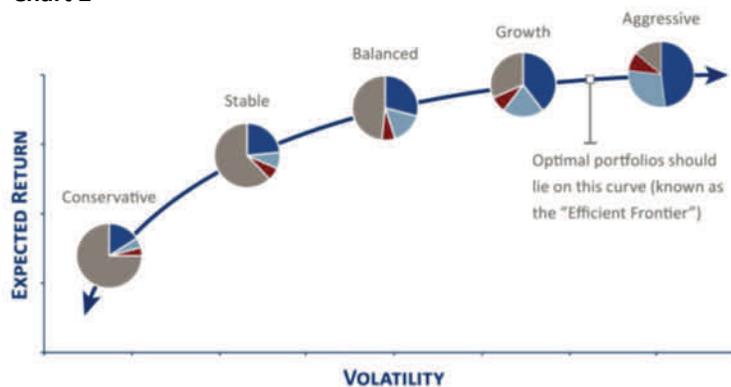
Constructing a diversified portfolio is a sophisticated process that is more than just a subjective art form; there is a considerable amount of science that assists Algonquin in preparing appropriate allocations for its clients. And this science is important. According to a well-regarded study, investment policy (asset allocation) explains 93.6% of the variation in total plan returns¹.

Algonquin’s Investment Committee determines what are known as “capital market assumptions” or “asset class inputs” for the asset allocation program. These inputs include the firm’s forward-looking long-term expected returns and standard deviations (used as a proxy to measure risk) for each asset class, as well as the expected correlations between these asset classes. The inputs are derived through a combination of a review of the performance, risk and correlation histories of various asset classes, coupled with the firm’s critical thinking on future expectations for those same asset classes. The expectation is that these inputs are long-term in nature and, as such, should not change meaningfully over shorter periods of time. Once inputs are finalized, they are entered into an allocation system that runs thousands of iterations to compose what is known as the “Efficient Frontier”.

According to Modern Portfolio Theory, investors can reduce the volatility of their portfolios by diversifying among different types of asset classes. The Efficient Frontier represents the theoretical set of diversified portfolios with the maximum expected return for each given level of risk. A portfolio is said to be more efficient than another (meaning it has lower risk, a higher expected return, or both) if it is closer to the frontier curve. No single point along the frontier is necessarily better than any other point. Where an individual client’s portfolio should lie is a decision they and Algonquin make based on their needs and ability and willingness to bear risk. The risk/return tradeoff of portfolios on the Efficient Frontier is displayed in Chart 2 which shows various levels of return and the volatility (typically defined as standard deviation) of each. Note that the returns are plotted on the vertical (Y) axis, and the volatility, or standard deviation, is plotted on the horizontal (X) axis. It is evident that as the return increases, the curve extends to the right to indicate an increase in risk.

“The Efficient Frontier represents the theoretical set of diversified portfolios with the maximum expected return for each given level of risk.”

Chart 2



¹Brinson, Gary P., L. Randolph Hood, and Gilbert L. Beebower. "Determinants of Portfolio Performance." Financial Analysts Journal 42.4 (1986): 39-44. Web.



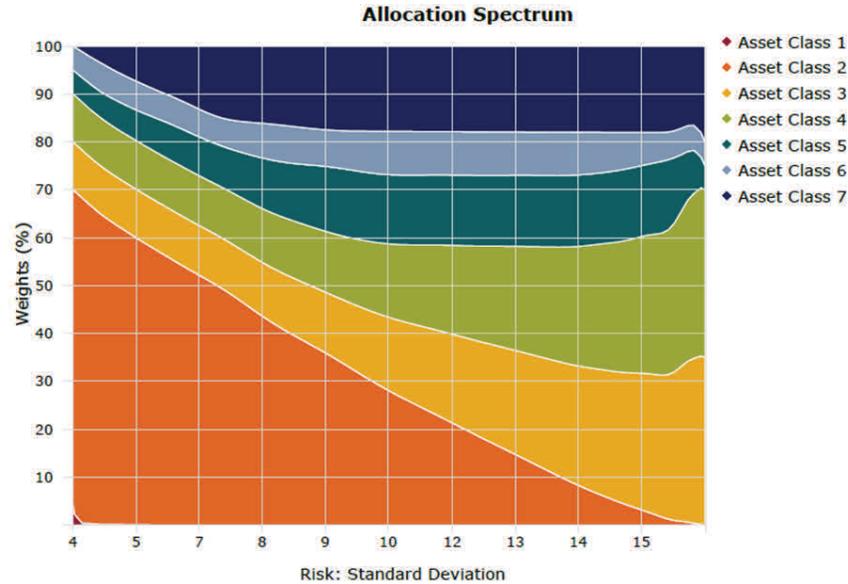
ALGONQUIN
ADVISORS

Please see Important Disclosure Information at the end of this presentation.

IMPORTANT: The projections or other information generated by Algonquin regarding the likelihood of various outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results.

Those same portfolios can also be viewed across the Efficient Frontier in Chart 3 below. As the risk level increases across the horizontal axis, the mix of asset classes also changes. The Efficient Frontier algorithm attempts to find the best mix of asset classes for a desired level of risk based on the inputs provided by Algonquin.

Chart 3

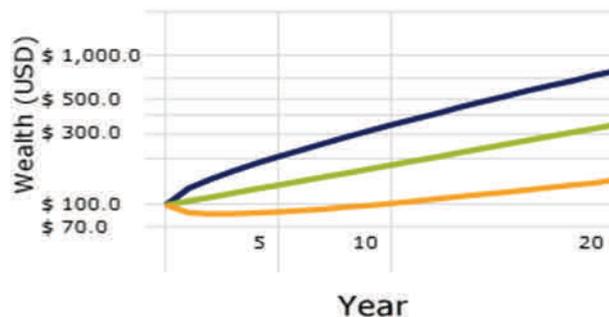


Source: Morningstar 2016

The range of portfolio values and returns can provide additional information about the relative risk of investing according to a specific asset allocation. Algonquin utilizes Monte Carlo simulation, a sophisticated mathematical approach used within the financial industry to model possible outcomes of future investment scenarios. While this method may reflect the uncertainty and randomness of future events, it is important to understand that it is based on assumptions for the expected future risk, returns and correlations of each asset class (the asset class inputs).

Chart 4 below displays a range of potential outcomes for the growth of the market value of a portfolio over time. The blue line represents the better expected outcomes for each portfolio while the orange line represents the poorer expected outcomes. The green line displays the median expected outcome.

Chart 4



Source: Morningstar 2016

“Algonquin utilizes Monte Carlo simulation, a sophisticated mathematical approach used within the financial industry to model possible outcomes of future investment scenarios.”

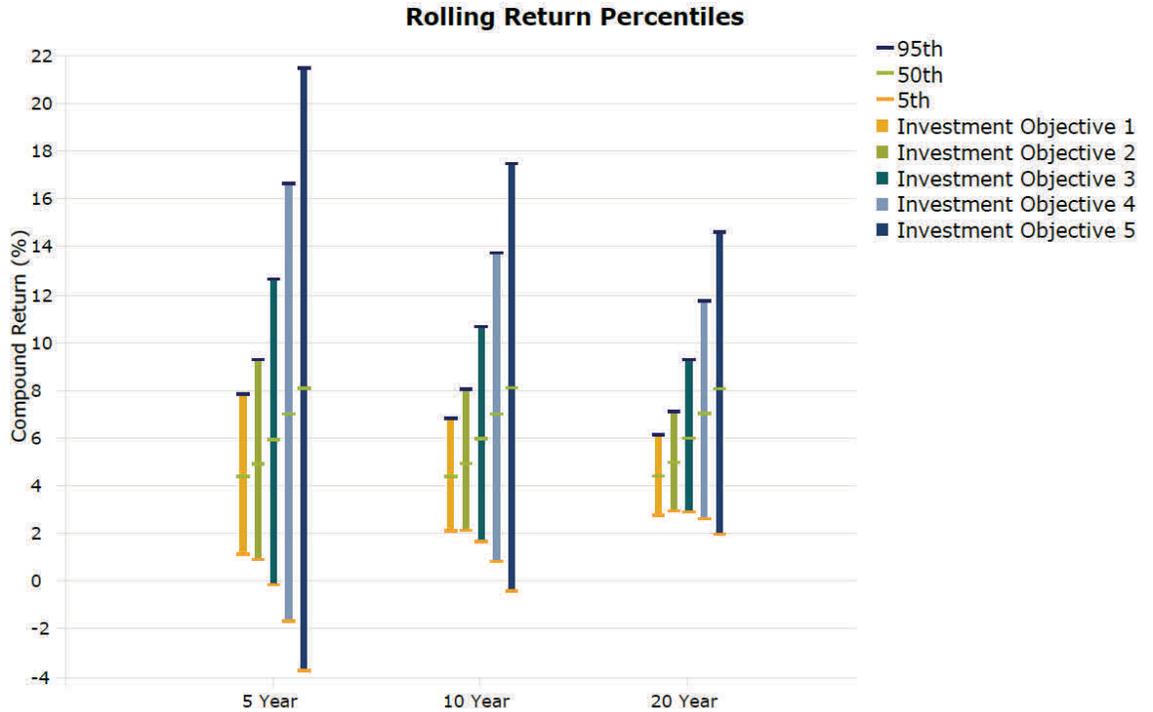


Please see Important Disclosure Information at the end of this presentation.
IMPORTANT: The projections or other information generated by Algonquin regarding the likelihood of various outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results.

For more information about Algonquin’s approach to asset allocation, please call us at 203-629-2114.

Chart 5 displays a range of potential outcomes for the returns of a variety of possible portfolios over time. Each line segment represents the returns of various portfolios over time, determined by Algonquin’s asset class inputs. The very upper end of each line represents better expected outcomes for the time frame, while the bottom end represents poorer expected outcomes. The dash in the middle of each segment represents the median expected outcome. It is important to note that over time, the length of each line typically gets shorter, which indicates a smaller band of expected returns (this is as a result of longer time periods offsetting the impact of any single year’s volatility). It is also interesting to note that the median returns tend to stay fairly consistent over time. What the chart is telling us is that the longer an investor stays with their plan, the smaller the band between the better and poorer expected outcomes, and the more likely the investor is to achieve his/her goals.

Chart 5



Source: Morningstar 2016

Algonquin believes that asset allocation and Efficient Frontier analysis are fundamental building blocks in helping clients achieve their long-term objectives. The firm has always put considerable time into determining client allocations. As the reader can tell from the above, the science element is critical to the firm’s investment decision-making process. Ultimately though, Algonquin has found that art of combining the science with each client’s unique needs leads to the most successful outcomes.



Please see Important Disclosure Information at the end of this presentation.
IMPORTANT: The projections or other information generated by Algonquin regarding the likelihood of various outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results.

Important Disclosure Information—Glossary of Terms and Index Definitions

Asset Class Inputs/Inputs - are the expected returns, standard deviations and correlations for asset classes used when determining assets allocation models.

Efficient Frontier: Efficient frontiers represent the efficient or optimal mixes of asset classes in an opportunity set. Therefore, each point on the efficient frontier maximizes the expected return per unit of risk.

Correlation: is a statistical measure of how the two data sets move in relation to one another. A perfect positive correlation of 1 means that when the one data set moves in one direction, the second data set will move in an identical fashion. A perfect negative correlation of -1 means that when one data set moves in one direction, the second data set will move by an equal amount in the opposite direction. If the correlation is 0, the movements between the two are uncorrelated and are completely random.

Median: is the value separating the higher half of a data set, from the lower half. In simple terms, it may be thought of as the "middle" value of a data set.

Monte Carlo Simulations - are quantitative tools used to model the probability of different outcomes in a process that cannot easily be predicted due to the intervention of random variables.

Standard Deviation: measures the historical variability of returns from its average. A higher standard deviation means a history of greater variability and uncertainty of returns and therefore more risk.

Barclays Capital Aggregate Bond Composite Index: This index is a broad-based benchmark that measures the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS, and CMBS. To qualify for inclusion, a bond or security must have at least one year to final maturity, and be rated investment grade Baa3 or better, dollar denominated, non-convertible, fixed rate and publicly issued.

FTSE EPRA/NAREIT Developed NR USD Index: This index is calculated by FTSE in association with EPRA, APREA and NAREIT and is designed to track the performance of listed real estate companies and REITS worldwide. Index constituents are free-float adjusted and screened for liquidity, size and revenue. The index series is calculated in accordance with the industry Classification Benchmark (ICB), a global standard developed in partnership between FTSE Group and Dow Jones Indices. Dividends are reinvested net of the maximum (no treaty) withholding tax rates and rates that reflect double taxation treaties.

HFR Fund of Funds Composite Index: HFR Indices are compiled by Hedge Fund Research, Inc. ("HFR"), an industry service provider. They are based on the performance of hedge funds in various strategies as reported by hedge fund managers to HFR. This index is an equal-weighted index composed of onshore and offshore hedge fund of funds. Funds included must report monthly returns net of all fees, report assets in USD, and manage at least \$50 million under management or have been actively trading for at least twelve months. Funds must also be included in the HFR database. Data for the current month and prior three months are considered estimates and are subject to change. Liquidated/closed funds are included as of the fund's last reported performance update. The index is rebalanced monthly. While the HFR Indices are frequently used, they have limitations (some of which are typical of other widely used indices). These limitations include survivorship bias; heterogeneity; and limited data.

ML US Treasury Bill TR 3-Month Index: This index is comprised of a single issue purchased at the beginning of the month and held for a full month. At the end of the month that issue is sold and rolled into a newly selected issue. The issue selected at each month-end rebalancing is the outstanding Treasury Bill that matures closest to, but not beyond, three months from the rebalancing date. To qualify for selection, an issue must have settled on or before the month-end rebalancing date. While the index will often hold the Treasury Bill issued at the most recent 3-month auction, it is also possible for a seasoned 6-month Bill to be selected.

MSCI Emerging Markets (USD)(TRN) Index: This index is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. This index excludes closed markets and those shares in otherwise free markets that are not purchasable by foreigners. The MSCI Emerging Markets Index consists of the following 23 emerging market country indices: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates. This index reinvests dividends net of withholding taxes.

MSCI Europe, Australasia and the Far East (EAFE) Index - Net: is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the U.S. & Canada. The MSCI EAFE Index consists of the following 22 developed market country indices: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the United Kingdom.

Russell 1000 Index: This index measures the performance of the large-cap segment of the U.S. equity universe. It is a subset of the Russell 3000 Index and includes approximately 1,000 of the largest securities based on a combination of their market capitalization and current index membership. The Russell 1000 represents approximately 92% of the capitalization of the Russell 3000 Index. The index is constructed to provide a comprehensive barometer for the large-cap segment and is completely reconstituted annually. Dividends are assumed to be re-invested.

Russell 2000 Index: This index measures the performance of the small-cap segment of the U.S. equity universe. The Russell 2000 Index is a subset of the Russell 3000 Index representing approximately 8% of the total market capitalization of that index. It includes approximately 2,000 of the smallest securities based on a combination of their market cap and current index membership. The index is constructed to provide a comprehensive small-cap barometer and is completely reconstituted annually. Dividends are assumed to be re-invested.

S&P Global Natural Resources NR USD Index: This index combines the S&P Global Natural Resources – Agriculture Index, the S&P Global Natural Resources – Energy Index and the S&P Global Natural Resources – Metals and Mining Index. To be eligible for this index, companies must have a total market capitalization above US\$ 1 billion at each rebalancing, a six-month average daily trading value above US\$ 10 million at each rebalancing and must trade on a developed exchange. The index uses a modified market cap weighting scheme. Constituent weights are driven by size and no single stock has a weight of more than 10% in the index. Net return reinvested is reflective of the return where dividends are reinvested after the deduction of withholding tax.



ALGONQUIN
ADVISORS

Important Disclosure Information

These materials are provided solely for informational purposes and may not be relied upon in evaluating the merits of investing in any fund. This information is being provided to you at your request, is confidential and may not be reproduced or redistributed. This information has been prepared for investors who are legally eligible and are suitable to invest in the types of investments described herein. Use by anyone other than the addressee is prohibited. By accessing and viewing this information you acknowledge and understand the intended purpose of such information. This report shall not constitute an offer to sell or the solicitation of any offer to buy. Securities shall not be offered or sold in any jurisdiction in which such offer, solicitation, or sale would be unlawful until the requirements of the laws of such jurisdiction have been satisfied. The projections or other information presented in this proposal regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. The information contained in this presentation utilizes sample data, is displayed for illustrative purposes only and should not be used to make investment decisions.

Estimated risk and performance results are based on a number of working assumptions, including estimates of asset class investment returns and future volatility, which may not be accurate now or in the future. These assumptions may vary over time and are subject to important risks and uncertainties. Such risks and uncertainties, including, for example, market turmoil, war, natural catastrophes, terrorism and ordinary market fluctuations, could cause actual results to differ materially from the assumptions. In addition, the assumptions used do not account for, or necessarily relate to, your current investment portfolio's actual historical returns or the actual historical returns of or any estimates about any accounts managed by any investment manager or any mutual fund. Indices are shown for demonstrative purposes only. Indices are unmanaged, assume reinvestment of income, and do not reflect the impact of advisory fees or transaction costs. An investor cannot invest directly in an index. Reference to an index does not imply that any portfolio will achieve return, volatility or other results similar to an index.

The views expressed in this document constitute the judgment of the investment manager, based on current market conditions. They are subject to change without notice. The views and strategies described herein may not be suitable for all investors. Algonquin makes no representations or warranties with respect to the accuracy, reliability, or utility of information obtained from third parties. Information has been obtained from sources believed to be reliable, but we do not guarantee their accuracy or completeness. While we have taken great care in the preparation of these materials, we cannot be responsible for clerical, computational, or other errors. Certain assumptions may have been made by these sources in compiling such information, and changes in such assumptions may have material impact on the information presented herein. Algonquin may have issued other reports that are inconsistent with, and reach different conclusions from, the information presented in this report. Prior reports reflect the different assumptions, views and analytical methods of the individuals who prepared them. Except where otherwise indicated herein, the information provided herein is based on matters as they exist as of the date of preparation, and may not be updated or otherwise revised to reflect information that subsequently becomes available, or changes occurring after the date hereof.

Certain information contained herein constitutes forward-looking statements which can be identified by the use of terms such as "may", "should", "expect", "anticipate", "project", "estimate", "intend", "continue" or "believe" (or the negatives thereof) or other variations thereof. Due to various uncertainties and actual events, including those discussed herein and in other documents, actual results or performance may differ materially from those reflected or contemplated in such forward-looking statements. As a result, investors should not rely on such forward-looking statements in making their investment decisions. Algonquin has no duty to update or amend such forward-looking statements.

Morningstar 2016. All rights reserved. Use of this content requires expert knowledge. It is to be used by specialist institutions only. The information contained herein is proprietary to Morningstar and/or its content providers. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information, except where such damages or losses cannot be limited or excluded by law in your jurisdiction. The information generated by this Morningstar report is hypothetical in nature, does not reflect actual investment results, are not guarantees of future results and should not be used to provide recommendations. Results vary over time. There is not direct correlation between a hypothetical investment and the anticipated performance of the fund. An investment in any fund referred to herein has not been recommended or approved by any U.S. Federal or state or any non-U.S. regulatory authority. Furthermore, the foregoing authorities have not passed upon the accuracy or determined the adequacy of this presentation. Any representation to the contrary is a criminal offense.

IRS Circular 230 Disclosure: Algonquin does not provide tax advice. Accordingly, any discussion of U.S. tax matters contained herein (including any attachments) is not intended or written to be used, and cannot be used, in connection with the promotion, marketing or recommendation by anyone unaffiliated with Algonquin of any of the matters discussed herein for the purpose of avoiding U.S. tax-related penalties.

Not FDIC Insured | Not Bank Guaranteed | May Lose Value
© 2016 Algonquin Advisors LLC. All Rights Reserved.



ALGONQUIN
ADVISORS