Long Short Whitepaper

What are Liquid Alternatives?

Liquid alternative funds and ETFs are vehicles that employ alternative investment strategies, under a new regulatory framework enacted by the Canadian Securities Administrators in 2019. The new regulatory framework allows for more investment flexibility, that has more commonly been employed in alternative strategies. Examples of alternative investing strategies include long/short equity, managed futures and merger arbitrage. Liquid alternative funds provide a vehicle for retail investors to access alternative strategies, that previously were only available to accredited investors and institutions.

Similar to traditional strategies, liquid alternatives focus on enhancing returns, and diversifying the source of risk, which can assist investors in constructing more optimal portfolios. For example in 2022, the MSCI World Index returned -19%, FTSE/TMX Bond Index returned -12%, while the Bloomberg All Hedge Fund Index fairing much better returning -7%. Portfolio construction benefits, which derive from accessing new sources of return and improving portfolio risk are the drivers between the suggested improvement of the "60/40" portfolio, to the "50/30/20", where 20% is allocated to differentiated alternative strategies, such as liquid alternatives.

Other Benefits of Liquid Alt ETFs

Access – Easy access through liquid alternative ETF structure, with no rigorous documentation requirements
Highly Liquid – Intraday liquidity on Canadian stock exchanges
Expertise – Managed by the team that brought Low volatility solutions to market; BMO GAM's Disciplined Equity team which has a 14yr track record in managing institutional equity portfolios
Cost effectiveness – Traditionally long-short strategies have charged much higher fees, including performance fees, which lessen the returns available to investors
Transparency – Daily portfolio transparency on BMO ETF webpage so investors will always know what's in the portfolio
Performance – Potential for stronger risk-adjusted performance and lower beta than long only equity funds
Diversification – Innovative portfolio structure allows for increased ability for stock selection with the ability to short
Democratizing Investing – Make traditionally exclusive investment strategies more widely available
Staying invested – The combined benefits of an alternative strategy can assist with staying the course and capitalizing on drawdowns to create better risk adjusted returns

Long Short Equity Strategy

The long short equity strategy is an investment strategy that takes long positions in equities the manager believes will outperform, and short positions in equities that are expected to underperform its peers. Long short strategies tend to have a partial long bias, for example a net equity exposure (% longs - % shorts) of 50%.

Investment options

BMO Long Short Canadian Equity ETF	BMO Long Short US Equity ETF
ZLSC	**ZLSU**
Mgmt. Fee: 0.65%	Mgmt. Fee: 0.65%
Distribution frequency: Q	Distribution frequency: Q
Risk* Rating: Low to Medium	**Risk* Rating:** Low to Medium

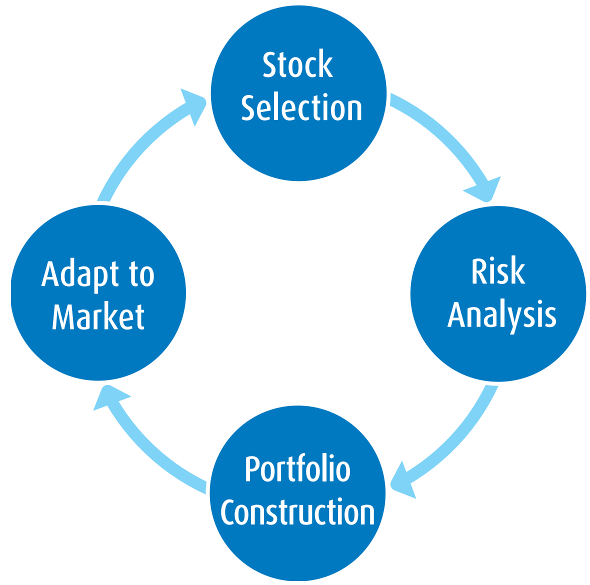
* Risk is defined as the uncertainty of return and the potential for capital loss in your investments.

Long short strategies offer 2 key benefits. First is improved alpha* capture, as the ability to short individual equities provides an enhanced ability for the manager to take advantage of stocks that are expected to underperform. Secondly, the short portfolio acts as a portfolio hedge against the long portfolio, which provides the ability to significantly lower risk relative to long only equities.

Related strategies include Active Extension†, where the net equity exposure is approximately 100%, for example 130/30 funds. Market neutral strategies should have net equity exposure of approximately 0%, whereby stock selection is the primary driver rather than market beta‡.

BMO's Approach to Long Short Investing

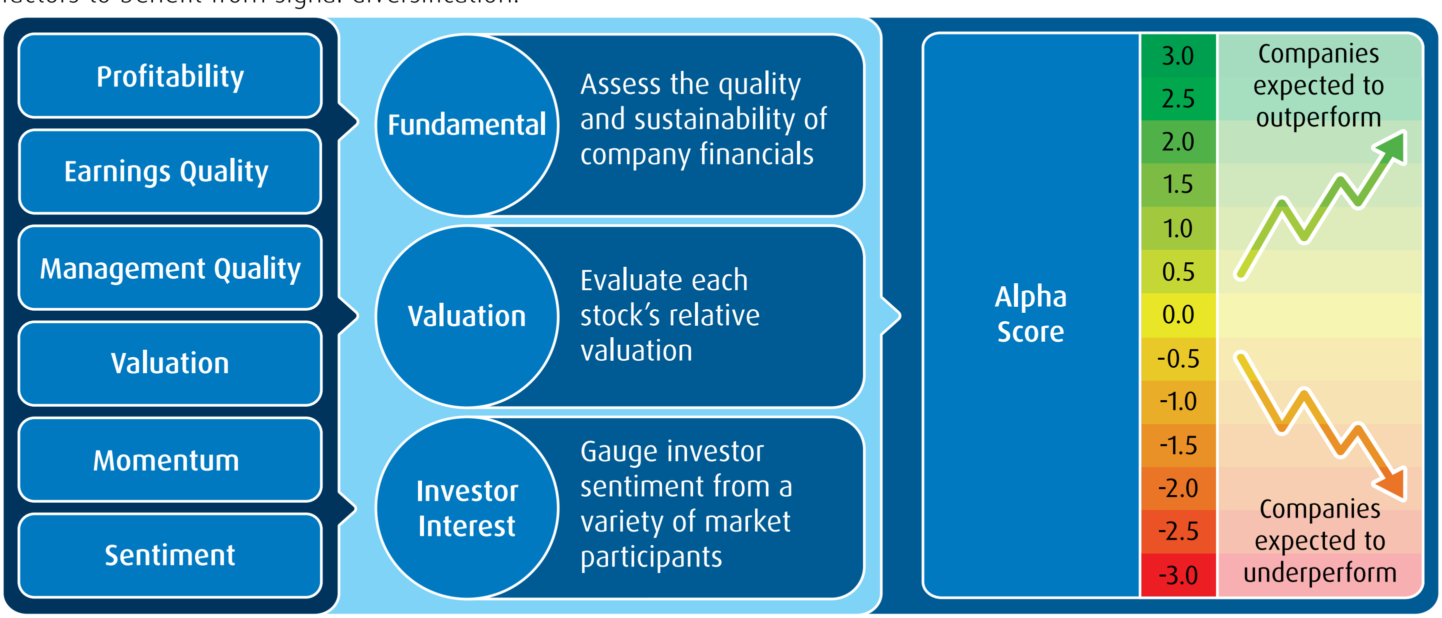
BMO's Disciplined Equity team's approach focuses on identifying candidates for both the long and short portfolios using a model driven process, and robust portfolio construction techniques to build a well balanced and risk-controlled final portfolio. A consistent monthly rebalancing and reconstituting adapts to new market information, reconstructing the optimal portfolio, while taking into account trading costs.



Model Driven process for stock selection

We compare stocks with its peers within the sector on fundamentals, valuation, and investor interest. We use these factors to compare companies and rate their attractiveness for investment. Companies that score well across multiple metrics have historically outperformed, while companies that scored badly have underperformed.

The multi-faceted alpha score is driven by economically meaningful investment factors which have been shown to lead to stock equity outperformance and underperformance historically. The weighting of the sub-component factors is monitored and weighted towards the most strongly performing factors in the respective markets, while balancing between factors to benefit from signal diversification.



* Alpha refers to excess returns earned on an investment above the benchmark return.
† Active Extension funds are a type of strategy the combines long and short exposures that allow the portfolio manager to generate more investible capital by taking gains from short positions and re investing in long positions of the fund.
‡ Beta is a numerical value to show the volatility of a security or portfolio against its benchmark.

Table 1: Sample Quantitative metrics we look at while judging a stock's attractiveness

Fundamental	Profitability	High cash earnings on capital and assets used in the business
	Earnings Quality	Accounting is conservative and earnings match cashflows. Earnings and Cashflows are growing
	Management Quality	Management returns cash to shareholders instead of empire building
Valuation	Value	High cash earnings on market price we pay to own the company
Investor Interest	Momentum	Rising stock price over multiple months
	Sentiment	Rising earnings estimates from analysts who follow the company

Portfolio construction: Risk versus Reward

With the BMO Long Short ETFs, we combine our alpha score with risk and cost considerations to build a well diversified portfolios which maximise risk adjusted returns.

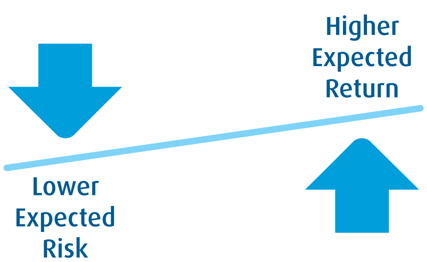
We monitor and control risks of various kinds using a combination of industry standard and proprietary tools.

Systematic Risks: Exposure to market movements: Cyclicals versus defensives, sector exposure etc.

Macro Economic Risks: Exposure to rising interest rates, inflation or recession risk

Fundamental Risks: Regulatory or legal risks, upcoming corporate actions like mergers etc.

We constantly monitor for changes in the market as falling prices or improving fundamentals and investor interest can provide new opportunities. We systematically rebalance the portfolio monthly to adjust it for market movements, and to capture new information which reveals opportunities or risks.



Other portfolio construction constraints ensure a well-diversified final portfolio, with managed exposure to sectors and individual securities.

Portfolio Construction Controls

Sector Weights	+/- 2% Net relative to parent equity index
Security Weights	+/- 3% Net relative to index weight
Shorting	Max -1.75% per individual short
Rebalance	Monthly – to consistently update the portfolio

Summary

Liquid alternatives will be increasingly attractive and utilized by investors, as they manage complex investment markets, as broadened investment tools provide opportunities to enhance portfolios. BMO's long short equity solutions are robustly constructed, transparent and efficient solutions to provide an additive, risk-managed solution to client portfolios.

BMO Disciplined Equity - Portfolio Managers

Chris Heakes

Chris joined the BMO ETF portfolio management team in 2011, and focuses on factor-based equity and derivative-overlay portfolios, including but not limited to BMO's Low Volatility, Dividend, and Covered Call equity ETF suites. His prior investment experience includes a role as a quantitative equity research associate, and work in investment funds product and client support. Chris holds a Masters of Finance from the University of Toronto, Rotman School of Management (Dean's List), where he studied investments, including derivatives and derivative pricing. Chris also holds a Bachelor of Arts degree from the University of Waterloo with studies in History and Mathematics and the CFA designation.

Sachal Mahajan

Sachal joined BMO Global Asset Management in December 2021 and focuses on the management of our active strategies in Canada, U.S. and Global markets. He has over 14 years of investment experience. Sachal has worked as an equity portfolio manager for State Street Global Advisors and OMERS with experience managing long only, long-short and low volatility portfolios. Prior to joining BMO, Sachal was a portfolio manager at CPP Investment Board managing and designing systematic strategies for pension portfolios. Sachal holds a Masters in Science in Physics from the Indian Institute of Technology Kanpur and a Masters in Quantitative Finance from the University of Waterloo. In addition, he is a CFA® charterholder and a member of the CFA Society of Toronto.

Ariel Liang

Ariel is responsible for equity portfolio management and research. She joined the company in 2018. Ariel began her career in the investment industry in 2005. Prior to joining BMO, she was a quantitative researcher at RBC Global Asset Management, where she designed quantitative investment strategies. Prior to that, she was an associate portfolio manager for the Canada Pension Plan Investment Board and an investment analyst for the Ontario Teachers' Pension Plan.

She holds a Master of Mathematical Finance and a Global Professional Master of Laws from University of Toronto. Ariel also has a M.A. in economics from Simon Fraser University and a B.B.A. in finance from Nankai University. In addition, she is a CFA charterholder and a Certified Financial Risk Manager.

BMO | Exchange Traded Funds

Let's connect

Call us at 1-800-668-7327 | bmogam.com/ca-en/investors