LIQUID ALTERNATIVES: DISRUPTIVE CHANGE IN THE CANADIAN MARKET

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SEPTEMBER 2018

MACKENZIE Investments | CONFIDENCE IN A CHANGING WORLD

Traditional vs. Alternative Asset Classes

	Equity	Fixed Income	Real Assets	Structured Products
Traditional	Developed Market Large Cap Equity	Developed Market Investment grade bonds	N/A	N/A
Less Traditional / Liquid Alternatives	Micro-Cap Equity, Prefs, Frontier Markets	EM debt, Floating rate, Converts	REITS, Infrastructure Equity, Commodities	Derivatives
Illiquid Alternatives	Private Equity	Private Debt	Direct ownership: Real Estate	Insurance

Traditional vs. Alternative Strategies

Traditional	**Alternative**
No Leverage Long only	**Leverage** Incl. Long/Short, physical short selling, and uncovered derivatives

Long/Short allows a portfolio manager to:

- **BENEFIT** from the full range of views – bullish and bearish.
- **REDUCE** the impact of market direction on investment returns as desired.
- Example: Market Neutral, 130/30, Relative Value

Leverage allows a portfolio manager to:

- **AMPLIFY** the risk/return characteristics of certain investments so that the portfolio has the desired level of exposure.
- Example: Risk Parity

MORE SIGNIFICANT DOWNSIDE

Leverage is an investment tool that amplifies risk and return characteristics so the investment has the desired exposure and return target. While the opportunity exists to significantly increase performance, the reverse (more significant downside) can also occur as leverage magnifies gains and losses on the underlying security. When investors undertake a short position on an investment, they are taking the position that the price of the security is going to fall. With physical short sales, the investor borrows securities and sells them in the open market. As part of the undertaking of a short position, a collateral deposit (called initial margin) is required to be placed with the borrowing agent/prime broker. In addition, if the value of a position falls below a specified level (known as the maintenance margin), the investor is required to top-up to the initial margin position. Short selling can cause potential unlimited losses.

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Multi-Asset and Single-Asset Strategies that use leverage and shorting to shape the risk/return profile

Traditional vs. Alternative Funds

	Mutual Funds, ETFs	**Liquid Alternative Mutual funds**	Hedge Funds, Private Equity
Traditional (Listed Securities)	Long only Generally no leverage	**Constrained Shorting and Leverage**	Generally Unconstrained
Liquid Alternatives		**Constrained Shorting and Leverage**	Generally Unconstrained
Illiquid Assets	maximum 10%	**maximum 10%**	Generally Unconstrained

Mackenzie – Why are we here?

1. Deep connection with Canadian retail investors and their advisors
2. Commitment to education
   - Seminars, printed materials, website, client and advisor events
3. Strategy design
   - Clear, careful discussion of how we could help investors
4. Background and diversity of PM team
   - Many years of experience managing similar strategies

Why Mackenzie

Investment Management Teams

	Area of expertise	# of members
Asset Allocation Team	Global Macro Strategies, Equity Long/Short and Portfolio Construction	8
Fixed Income Team	Credit Absolute Return	19
Systematic Strategies Team	Equity Long/Short	7

PORTFOLIO MANAGERS AND INVESTMENT DIRECTORS

Asset Allocation	Fixed Income	Systematic Strategies	Investment Directors
Alain Bergeron, M.Sc., CFA, CMT	Steve Locke, MBA, CFA	Rick Weed, M.Sc, CFA	Allan Seychuk, CFA
Nelson Arruda, MFin, M.Sc., CFA	Konstantin Boehmer, MBA	Matthew Cardillo, M.Sc, CFA	Kristi Ashcroft, CFA
Michael Kapler, MMF, CFA	Felix Wong, MBA,CFA		Daniel Arsenault, FRM, CFA, MBA
Blair Ireland, MA(Math), CFA	Dan Cooper, CFA		
	Movin Mokbel, MBA, CFA		

Investment Team – Nelson Arruda

Industry	Alternative Investing	Mackenzie
2009	2010	2017

- **Nelson Arruda** has more than 8 years of alternatives investing experience, including lengthy experience managing tactical asset allocation strategies and active commodity and currency alpha strategies.

Nelson Arruda

MFin, MSc, CFA

- Nelson Arruda is Vice President, Investment Management within Mackenzie's Multi-Asset Strategies Team. His responsibilities include portfolio management and oversight of the Asset Allocation Team's multi-asset portfolios, being a listed PM on Symmetry, ETF Portfolios, and the Mackenzie Multi-Strategy Alternative Fund. His responsibilities include alpha research, risk management, portfolio construction, and overall analytics. Prior to joining Mackenzie Investments in 2017, Nelson spent 7 years at the Canada Pension Plan Investment Board (CPPIB) where he held various roles, including lead PM of the commodity strategy. His investment experience includes research and portfolio management of multi-asset strategies, including tactical asset allocation, active commodities, and active currencies. Prior to CPPIB, he was a Financial Engineer at State Street, where we worked with multiple pension plans in the EU and North America on Liability Modelling.

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Nelson Arruda, CFA
VP and Portfolio Manager, Multi-Asset Strategies

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The Case For Liquid Alternative Investments

Investors and Advisers Face Many Challenges

- Investors
  - Market Volatility
  - Concentrated Portfolios
  - Increasing Liabilities
- Advisers
  - Lack of options
  - Alternatives have generally not been accessible to retail investors without large amounts or capital and onerous paperwork
  - Alternatives are also difficult to implement and time consuming

Liquid Alternatives Can Provide Part of The Solution

- The majority of Investors have equity concentrated portfolios
- Liquid Alternative Investments can increase diversification
- Diversification across strategies is key as picking the winner is difficult

Comparing Alternative Funds to Conventional Mutual Funds & Hedge Funds

	Conventional Mutual Funds & ETFs	Mackenzie Exemption (Based on Regulator Rule Proposal For Comment)	Hedge Funds
Borrowing	5% of NAV***	50% of NAV*	Generally Unlimited
Short Selling	20% of NAV (150% cash cover)	50% of NAV* (Cash cover no longer required)	Generally 100% of NAV (No cash cover)
Concentration per issuer	10%	20%	Generally Unlimited
Leverage	None	3x (300%)**	Generally Unlimited
Illiquid Assets	10% of NAV	10% of NAV	Generally Unlimited
Redemption	Daily liquidity	Daily Liquidity	Generally Mthly./Qrtrly.
Investors	Retail	Retail	Generally Accredited

*50% combined between borrowing and short selling.
** Aggregate gross exposure
***To finance redemptions and for other administrative purposes, only

New Rules Open the Door to Liquid Alternatives…but no single strategy can always be the winner

2012	2013	2014	2015	2016	2017
5.5%	14.8%	8.8%	-0.1%	5.2%	10.6%
7.6%	2.5%	2.5%	-0.2%	4.0%	4.1%
4.4%	0.9%	1.0%	-0.9%	2.3%	3.3%
0.3%	-0.6%	0.6%	-1.2%	2.3%	2.8%
-7.7%	-3.3%	-1.9%	-2.0%	-2.9%	2.4%

- Long-short Equity
- Nontraditional Bond
- Managed Futures
- Market Neutral
- Multicurrency

The table shows returns for U.S. active fund categories on these alternative strategies

Multiple strategies can be used when considering alternatives. This is important as not all alternative investment strategies perform the same in all market environments.

Source: Morningstar Direct, U.S. active fund categories, return numbers are in USD.

Key Components of the Mackenzie Multi-Strategy Absolute Return Fund

MACKENZIE MULTI-STRATEGY ABSOLUTE RETURN FUND

Risk Control Overlay

Equity Long/Short

- **Global Equity Alpha** (Systematic Strategies Team)
- **Global Equity Factor** (Asset Allocation Team)

Credit Absolute Return
(Fixed Income Team)

- **Credit Momentum**
- **Short Credit**

Global Macro
(Asset Allocation Team)

- **Commodity Alpha**
- **Currency Alpha**
- **Managed Futures**
- **GTAA**
- **Risk Parity**

Multi-Strategy Absolute Return Fund – Investment Process

STRATEGIC ALLOCATION

Analysis of long-term risk, return and correlation characteristics among all sub-strategies

Diversify risk so no single return stream dominates

DYNAMIC TILTS

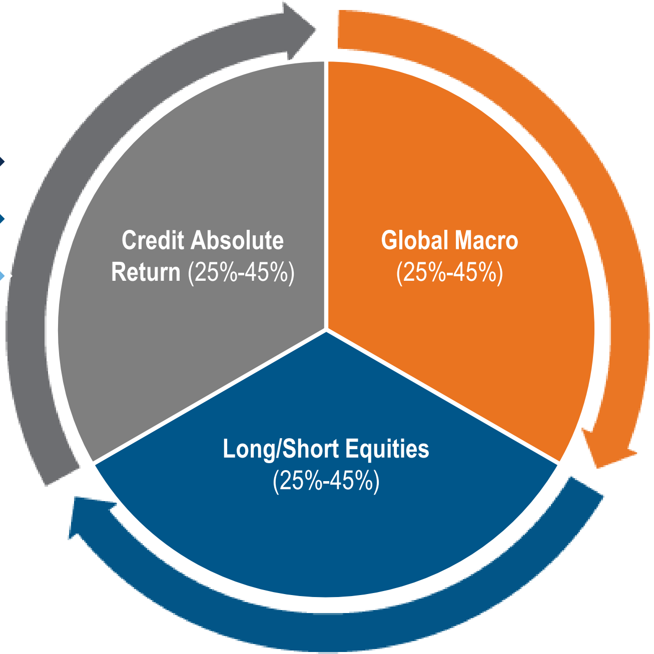
Forecast opportunity for each strategy based on market conditions

Adjust weightings of each strategy within a modest range

RISK CONTROL

Look-through to all underlying holdings to provide continual oversight and risk management:

- Target sensitivity (beta) to equity and fixed income markets
- Leverage constraints
- Concentration limits



The percentages above are general guidelines and are subject to change without notice.

Hypothetical Performance

- In the slides that follow, we present hypothetical past performance of portfolios that approximates the investment strategy of the Mackenzie Multi-Strategy Absolute Return Fund (the Fund), and the Equity Long/Short sleeve, the Credit Momentum sleeve, the Global Macro sleeve and the systematic component of the Risk Control Overlay sleeve (the key components).
- Hypothetical performance is for illustrative purposes only. It is simulated and theoretical and should not be interpreted as an indication or guarantee of future results. Actual performance of the Mackenzie Multi-Strategy Absolute Return Fund and the key components of the Fund may vary significantly.
- Standard deviation provides a measure of the variability of returns that have occurred relative to the average return. The higher the standard deviation, the greater is the range of returns that has been experienced. Standard deviation is commonly used as a measure of risk.
- We have made a number of assumptions to calculate the Fund’s and its key components’ hypothetical performance.

Hypothetical Performance

Assumptions

- Hypothetical performance of the Fund was generated using only its strategies which can generally be characterized as “systematic”, where backtested performance can be historically simulated primarily based on objective factors. This includes the Equity Long/Short sleeve, the Credit Momentum sleeve, the Global Macro sleeve and the systematic component of the Risk Control Overlay sleeve. Hypothetical performance of these key components was created based on the assumptions we present here.

- The following strategies were not used to develop the Fund’s hypothetical performance due to the level of judgement and subjectivity involved: risk management component the Risk Control Overlay sleeve and the Short Credit sleeve.

- Futures are used in the Risk Control Overlay sleeve to bring the overall beta toward 0.2.

- For more information on the Fund’s strategies, refer to slide 6 or the Fund’s simplified prospectus.

- The rebalance frequency is monthly for the Equity Long/Short sleeve and weekly for the Credit Momentum and the Global Macro sleeves, aligned with the intended live rebalancing frequencies. Neutral weights for each sleeve are used to calculate hypothetical performance in their entirety: Equity Long/Short 31%, Credit Momentum 33%, and Global Macro 36%.

- Hypothetical performance is from December 31, 2007 to December 31, 2017.

- Hypothetical performance is calculated gross of fees.

Hypothetical Performance

Assumptions – continued

- The currency associated with hypothetical performance is the Canadian Dollar.
- All trades are done at End Of Day pricing with the addition of simulated transaction costs. When ETFs are used, management expense ratios (MER) are included.
- Estimated prime broker borrowing costs are also included as well as interest rates differentials between currencies.
- Models are programmed to fully generated holdings, and no manual intervention is performed during the hypothetical performance calculations.
- Models use market and economic data sourced from third parties.
- The Equity Long/Short sleeve runs portfolio optimization which controls for net country, sector, industry, as well as maximum long and short positions to control concentration.

Hypothetical Performance

Transaction Cost Assumptions

- Transaction costs represent an estimate for full cost of trading which includes:
  - Spread
  - Commission
  - Market impact

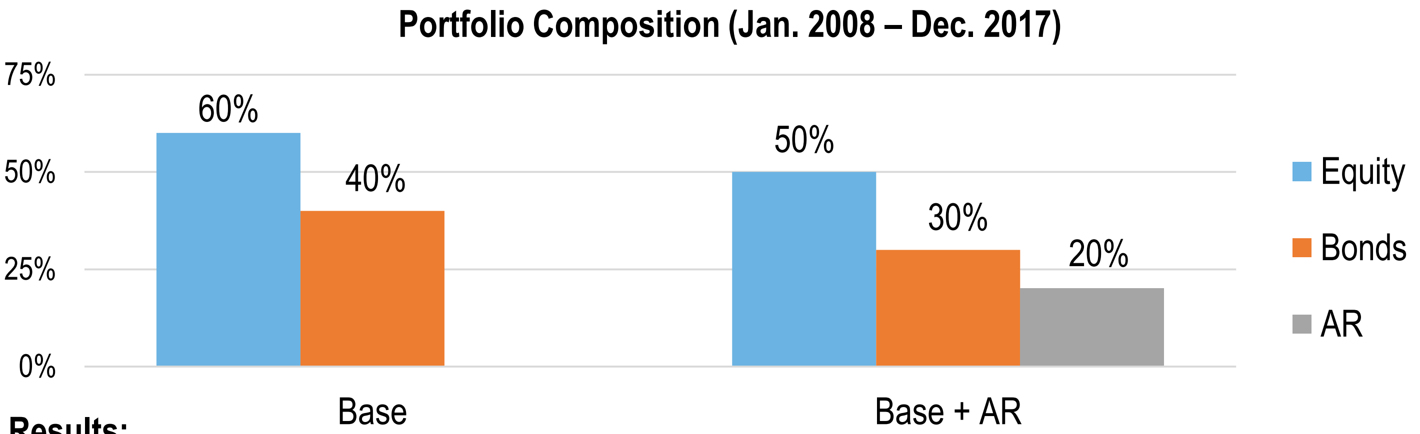
    - Market impact estimate includes size aggressiveness of execution strategy.

    - Includes, when applicable, size of market, region, and capital (i.e. Large, Mid-Cap, and Small).

    - Short equity positions incur an estimated prime broker borrowing cost.

Example: Adding an Alternative Fund to your Portfolio

Funded equally from equities and bonds



Results:

	Base	Base + AR
Return	6.2%	7.0%
Risk	10.0%	8.8%
Sharpe	0.45	0.60

Illustrative purposes only. The returns, risks and Sharpe ratios presented above are based on 10 years (2008-2017) of historical returns data for the equity and fixed income. The equity component is represented by a 70%/30% split of MSCI World Net TR Local Index and SP/TSX 60 TR Index. The bond component is represented by ICE BofAML Canada Broad Market Index. The returns, risks and Sharpe ratios for the Absolute Return Fund (AR) is based on back tested returns data for Mackenzie Multi-Strategy Absolute Return Fund over the same time period. This information is hypothetical and does not represent the investment selected with the full benefit of hindsight, after their performance over the period shown was known. The results achieved in our simulations do not guarantee, and should not necessarily be relied upon as a performance or the actual accounts of any investors or any mutual funds including Mackenzie Multi-Strategy Absolute Return Fund. The securities selected and asset allocations used to create the back tested results were n indication of, future investment results for Mackenzie Multi-Strategy Absolute Return Fund.

Conclusion

In building a core alternative solution, we sought to achieve three specific objectives:

- Seeks an absolute return
- Targeted volatility
- Aims for low beta to global equity markets

Thank you!

Questions?