

Model ETF Portfolios as of December 31, 2022

For illustration purposes only

Mackenzie Allocation ETFs

 60% bonds
 50% bonds
 40% bonds
 30% bonds
 20% bonds

 40% stocks
 50% stocks
 60% stocks
 70% stocks
 80% stocks











		Mackenzie Conservative Allocation ETF	50% MCON / 50% MBAL	Mackenzie Balanced Allocation ETF	50% MBAL / 50% MGRW	Mackenzie Growth Allocation ETF
Underlying ETFs	Symbol	MCON		MBAL		MGRW
Mackenzie Canadian Aggregate Bond Index ETF	QBB	35.40%	29.50%	23.60%	17.70%	11.80%
Mackenzie US Aggregate Bond Index ETF (CAD-Hedged)	QUB	13.80%	11.50%	9.20%	6.90%	4.60%
Mackenzie Dev. ex-NA Aggregate Bond Index ETF (CAD-Hedged)	QDXB	9.60%	8.00%	6.40%	4.80%	3.20%
Mackenzie Emerging Markets Local Currency Bond Index ETF	QEBL	1.20%	1.00%	0.80%	0.60%	0.40%
Mackenzie Canadian Equity Index ETF	QCN	12.00%	15.00%	18.00%	21.00%	24.00%
Mackenzie US Large Cap Equity Index ETF	QUU	18.00%	22.50%	27.00%	31.50%	36.00%
Mackenzie International Equity Index ETF	QDX	7.20%	9.00%	10.80%	12.60%	14.40%
Mackenzie Emerging Markets Equity Index ETF	QEE	2.80%	3.50%	4.20%	4.90%	5.60%
Target asset allocations as of December 31, 2022		100.00%	100.00%	100.00%	100.00%	100.00%
Management Expense Ratio (MER)		0.19%	0.19%	0.19%	0.19%	0.19%
Hypothetical Performance as of December 31, 2022						
YTD Return		-11.53%	-11.40%	-11.28%	-11.12%	-10.97%
1-Year Return		-11.53%	-11.40%	-11.28%	-11.12%	-10.97%
3-Year Annualized Return		1.08%	1.98%	2.87%	3.75%	4.63%
5-Year Annualized Return		3.01%	3.75%	4.48%	5.20%	5.92%
10-Year Annualized Return		5.33%	6.30%	7.26%	8.23%	9.19%
20-Year Annualized Return		5.40%	5.87%	6.34%	6.79%	7.23%
30-Year Annualized Return		6.67%	7.02%	7.35%	7.67%	7.98%
40-Year Annualized Return		8.40%	8.73%	9.04%	9.33%	9.61%
50-Year Annualized Return		8.53%	8.81%	9.07%	9.32%	9.55%
Lowest 1-Year Return		-18.27%	-21.53%	-24.70%	-27.77%	-30.74%
50-Year Annualized Standard Deviation		6.90%	7.71%	8.64%	9.65%	10.71%

Sources: Mackenzie Investments, Morningstar Direct, as of December 31, 2022

This table is published by Justin Bender for your information only. Information on which this table is based is available on request. Particular investments or trading strategies should be evaluated relative to each individual's objectives in consultation with the Investment Advisor. Opinions of Justin Bender constitute his judgment as of the date on this document, and are subject to change without notice. They are provided in good faith but without responsibility for any errors or omissions contained herein. This table is furnished on the basis and understanding that neither Justin Bender nor his employees, agents or information suppliers is to be under any responsibility of liability whatsoever in respect thereof.



Performance Methodology as of December 31, 2022

Canadian Bonds

01/1970-12/1979: Monthly returns of the FTSE Canada 91 Day T-Bill Index (35% weighting) + FTSE Canada Long-Term Bond Index (65% weighting), rebalanced monthly 01/1980-present: Monthly returns of the FTSE Canada Universe Bond Index

Global Bonds

01/1970-12/1979: Monthly returns of the FTSE Canada 91 Day T-Bill Index (35% weighting) + FTSE Canada Long-Term Bond Index (65% weighting), rebalanced monthly

01/1980-12/1996: Monthly returns of the FTSE Canada Universe Bond Index

01/1997-present: Monthly returns of the ICE BofA Merrill Lynch Global Broad Market Index (CAD Hedged)

Canadian Stocks

01/1970-present: Monthly returns of the S&P/TSX Composite Index

IIS Stocks

01/1970-present: Monthly returns of the S&P 500 Index (in CAD)

International Stocks

01/1970-present: Monthly returns of the MSCI EAFE Index (net div.) (CAD)

Emerging Markets (EM) Stocks

01/1970-12/1987: Monthly returns of the S&P/TSX Composite Index

01/1988-12/2000: Monthly returns of the MSCI Emerging Markets Index (gross div.) (CAD) 01/2001-present: Monthly returns of the MSCI Emerging Markets Index (net div.) (CAD)

Mackenzie Conservative Allocation ETF (MCON)

01/1970-09/2020: 35.4% Canadian Bonds + 24.6% Global Bonds (CAD-hedged) + 12% Canadian Stocks + 18% U.S. Stocks + 7.2% International Stocks + 2.8% EM Stocks, minus 0.0167% per month, rebalanced monthly 10/2020-present: Monthly returns of the Mackenzie Conservative Allocation ETF (MCON)

50% MCON / 50% MBAL

01/1970-Present: 50% Mackenzie Conservative Allocation ETF (MCON) + 50% Mackenzie Balanced Allocation ETF (MBAL), rebalanced monthly

Mackenzie Balanced Allocation ETF (MBAL)

01/1970-09/2020: 23.6% Canadian Bonds + 16.4% Global Bonds (CAD-hedged) + 18% Canadian Stocks + 27% U.S. Stocks + 10.8% International Stocks + 4.2% EM Stocks, minus 0.0167% per month, rebalanced monthly 10/2020-present: Monthly returns of the Mackenzie Balanced Allocation ETF (MBAL)

50% MBAL / 50% MGRW

01/1970-present: 50% Mackenzie Balanced Allocation ETF (MBAL) + 50% Mackenzie Growth Allocation ETF (MGRW), rebalanced monthly

Mackenzie Growth Allocation ETF (MGRW)

01/1970-09/2020: 11.8% Canadian Bonds + 8.2% Global Bonds (CAD-hedged) + 24% Canadian Stocks + 36% U.S. Stocks + 14.4% International Stocks + 5.6% EM Stocks, minus 0.0167% per month, rebalanced monthly 10/2020-present: Monthly returns of the Mackenzie Growth Allocation ETF (MGRW)