



## Model Portfolios: Individual ETFs



Security Name	Ticker					
BMO Aggregate Bond Index ETF	ZAG	70.0%	55.0%	40.0%	25.0%	10.0%
Vanguard FTSE Canada All Cap Index ETF	VCN	10.0%	15.0%	20.0%	25.0%	30.0%
iShares Core MSCI All Country World ex Canada Index ETF	XAW	20.0%	30.0%	40.0%	50.0%	60.0%
		<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Weighted Average Management Expense Ratio (MER)</b>		<b>0.12%</b>	<b>0.13%</b>	<b>0.14%</b>	<b>0.15%</b>	<b>0.16%</b>

Model Portfolio Performance as of December 31, 2018						
1-Year Return	-0.45%	-1.30%	-2.14%	-2.98%	-3.83%	
3-Year Annualized Return	3.31%	3.83%	4.51%	5.19%	5.85%	
5-Year Annualized Return	4.75%	5.45%	6.15%	6.83%	7.52%	
10-Year Annualized Return	5.87%	6.83%	7.76%	8.67%	9.55%	
20-Year Annualized Return	5.25%	5.34%	5.37%	5.34%	5.24%	
Annualized Standard Deviation	4.62%	5.94%	7.49%	9.16%	10.93%	
Lowest 12-Month Return (March 2008 to February 2009)	-7.93%	-13.80%	-19.62%	-25.38%	-31.09%	

Sources: Vanguard, BMO, BlackRock, Morningstar Direct, MSCI, S&P Dow Jones Indices, FTSE TMX Indices

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## Model Portfolio Return Methodology

*as of December 31, 2018*

The performance data in the table above is a blend of actual fund returns and index returns.

The ETFs in the model portfolios were launched in 2010, 2013 and 2015, respectively. We used actual fund returns beginning in the first full month after each fund's inception. For earlier periods we used the returns of the fund's benchmark index (or a closely related index) and subtracted the current management expense ratio of the fund. This is an imperfect but reasonable proxy for how index funds would have performed.

All portfolios were assumed to be rebalanced annually on January 1.

*Past performance does not guarantee future results.* The historical performance of indexes is illustrative only and will not necessarily mirror the future performance of any fund tracking that benchmark.

### **BMO Aggregate Bond Index ETF (ZAG)**

Actual fund returns: February 2010–present

FTSE TMX Canada Universe Bond Index minus 0.10% annually: January 1998–January 2010

### **Vanguard FTSE Canada All-Cap Index ETF (VCN)**

Actual fund returns: September 2013–present

MSCI Canada IMI Index minus 0.06% annually: January 1998–August 2013

### **iShares Core MSCI All Country World ex Canada Index ETF (XAW)**

Actual fund returns: March 2015–present

50% S&P 500 Index (in CAD) / 50% MSCI EAFE plus Emerging Markets Index (net div.) (in CAD) minus 0.22% annually: January 2001–April 2014

50% S&P 500 Index (in CAD) / 50% MSCI EAFE plus Emerging Markets Index (gross div.) (in CAD) minus 0.22% annually: January 1998–December 2000