

FOR THE WEEK ENDING APRIL 19, 2024

APRIL 22, 2024

**40**  
ETF  
Providers

**1368**  
ETFs  
(+16%YoY)

**\$451B**  
CAD AUM  
(+21%YoY)

**\$15.5**  
Traded  
(Last Week)

**WEEKLY CREATIONS/REDEMPTIONS BY ASSET CLASSES**

Equity (+C\$982M) and fixed income (+C\$683M) led inflows last week

	\$ Traded (CAD M)	Short Int (% of SO)	AUM (CAD M)	Net C/R (CAD M)	Net C/R (% AUM)		
					1-Week	1-Month	1-Year
Equity	9,563.2	0.7%	290,032	982.3	0.3%	1.9%	11.5%
Fixed Income	2,605.0	0.3%	104,110	682.6	0.7%	1.5%	19.6%
Mixed Allocation	309.3	0.0%	15,997	99.1	0.6%	2.6%	25.8%
Cryptocurrency	542.1	0.6%	6,273	21.7	0.3%	-0.6%	20.0%
Specialty/Alternative	61.1	0.5%	3,088	2.4	0.1%	0.1%	2.9%
Commodity	629.7	0.3%	3,013	1.1	0.0%	1.7%	-2.5%
Preferreds	123.1	1.2%	6,287	-29.9	-0.5%	-0.7%	-5.0%
Cash	1,654.1	0.5%	21,758	-645.8	-2.9%	-3.8%	15.4%
<b>Total</b>	<b>15,487.6</b>	<b>0.5%</b>	<b>450,558</b>	<b>1,113.7</b>	<b>0.2%</b>	<b>1.4%</b>	<b>13.7%</b>

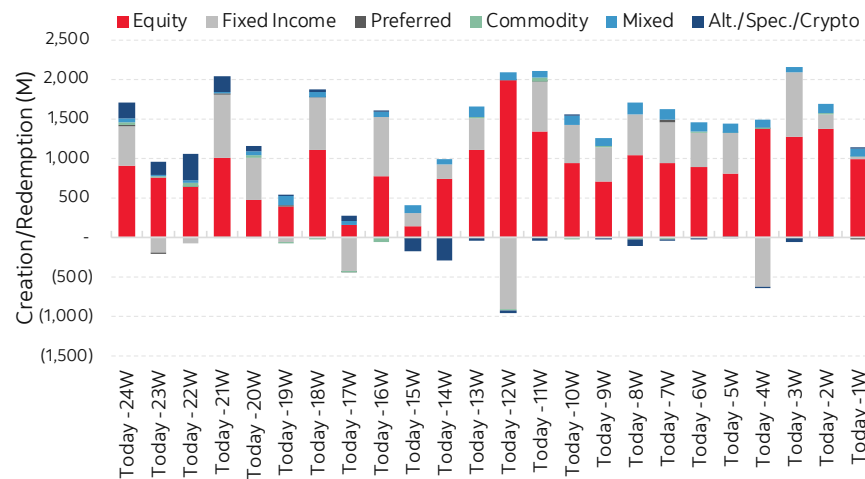
**WEEKLY LARGEST CREATIONS/REDEMPTIONS**

Investors poured into Canadian banks (again) and ultra-short bonds (ZEB, ZST); while cash and broad Cdn equities were sold (PSA, XIC)

Ticker	Name	Returns (1-Week)	Short Int (% of SO)	\$ Traded (CAD M)	Net C/R (CAD M)	Net C/R (% of AUM)
ZEB	BMO Equal Weight Banks Index ETF	-0.9%	2.8%	1,231.1	<b>543.5</b>	16.8%
ZST	BMO Ultra Short-Term Bond ETF	0.1%	0.1%	345.2	<b>327.5</b>	25.0%
XSP	iShares Core S&P 500 Index ETF CAD	-3.1%	1.1%	492.5	<b>296.4</b>	3.1%
VSF	Vanguard Canadian Short-Term Bon	-0.0%	0.0%	229.0	<b>214.3</b>	23.1%
VFV	Vanguard S&P 500 Index ETF	-3.3%	0.0%	499.0	<b>122.8</b>	0.9%
XBB	iShares Core Canadian Universe Bon	-0.5%	0.2%	199.5	<b>122.2</b>	1.8%
ZSP	BMO S&P 500 Index ETF	-3.2%	2.1%	481.4	<b>72.0</b>	0.5%
PSA	Purpose High Interest Savings Fund	0.1%	0.0%	776.8	<b>-571.6</b>	-14.6%
XIC	iShares Core S&P/TSX Capped Comp	-0.4%	3.4%	501.4	<b>-276.3</b>	-2.4%
ZFL	BMO Long Federal Bond Index ETF	-1.5%	0.0%	291.8	<b>-218.4</b>	-6.5%
XIU	iShares S&P/TSX 60 Index ETF	-0.3%	5.1%	1,106.7	<b>-141.8</b>	-1.1%
DRMD	Desjardins RI Developed ex-USA ex-C	-2.0%	0.2%	72.9	<b>-71.9</b>	-92.8%
CSAV	CI High Interest Savings ETF	0.1%	0.0%	149.7	<b>-70.3</b>	-0.9%
DGR/B	CI WisdomTree US Quality Dividend	-2.0%	0.1%	44.5	<b>-37.8</b>	-15.4%

**HISTORICAL CREATIONS/REDEMPTIONS BY ASSET CLASS**

Strong equity flows keep sustaining elevated Cdn ETF flows as cash selling offsets bond buying



**LAST WEEK'S MOST ACTIVE ETFs**

Investors traded C\$15.5B last week, led by Cdn banks Cdn equities, cash (ZEB, XIU, PSA)

Ticker	Name	Returns (1-Week)	Short Int (% of SO)	B/A Spread (bps)	\$ Traded (CAD M)	\$ Traded vs CR/RD
ZEB	BMO Equal Weight Banks Index ETF	-0.9%	2.8%	1.6	<b>1,231.1</b>	2.3 x
XIU	iShares S&P/TSX 60 Index ETF	-0.3%	5.1%	1.4	<b>1,106.7</b>	7.8 x
PSA	Purpose High Interest Savings Fund	0.1%	0.0%	1.2	<b>776.8</b>	1.4 x
XIC	iShares Core S&P/TSX Capped Comp	-0.4%	3.4%	1.7	<b>501.4</b>	1.8 x
VFV	Vanguard S&P 500 Index ETF	-3.3%	0.0%	3.5	<b>499.0</b>	4.1 x
XSP	iShares Core S&P 500 Index ETF CAD	-3.1%	1.1%	1.9	<b>492.5</b>	1.7 x
ZSP	BMO S&P 500 Index ETF	-3.2%	2.1%	2.3	<b>481.4</b>	6.7 x
XEG	iShares S&P/TSX Capped Energy Ind	-1.1%	9.0%	1.5	<b>365.0</b>	27.5 x
ZST	BMO Ultra Short-Term Bond ETF	0.1%	0.1%	1.5	<b>345.2</b>	1 x
ZFL	BMO Long Federal Bond Index ETF	-1.5%	0.0%	1.6	<b>291.8</b>	1.3 x
CASH	Horizons High Interest Savings ETF	0.1%	0.0%	1.1	<b>291.2</b>	232.1 x
HQU	BetaPro NASDAQ-100 2x Daily Bull ET	-10.7%	0.2%	1.5	<b>258.4</b>	188.8 x
VSF	Vanguard Canadian Short-Term Bon	0.0%	0.0%	1.5	<b>229.0</b>	1.1 x
HNU	BetaPro Natural Gas Leveraged Daily	-5.2%	0.3%	1.5	<b>208.5</b>	24.4 x



## EQUITY FUND FLOWS

### Last Week's Net Creations/Redemptions by Strategy & Sector

Investors largely bought blend (C\$1,077M/+0.5%) and financials (C\$577M/+3.7%)

	\$ Traded (CAD M)	Short Int (% of SO)	AUM (CAD M)	1-Week C/R (CAD M)	Net C/R (% AUM)		
					1-Week	1-Month	1-Year
Blend	7,417.0	1.0%	205,554	1,076.8	0.5%	2.2%	12.0%
Low Volatility	67.7	0.0%	6,186	9.5	0.2%	0.5%	8.1%
Value	178.4	0.1%	11,129	11.7	0.1%	1.0%	7.7%
Growth	734.2	0.1%	37,692	-6.5	-0.0%	0.5%	0.9%
Dividend/Income	455.1	0.1%	19,100	-6.4	-0.0%	2.1%	23.0%
Multi-Factor	10.9	0.0%	2,278	-5.3	-0.2%	-0.6%	7.3%
ESG/SRI	128.8	0.0%	7,346	-77.4	-1.0%	0.2%	62.4%
Leverage/Inverse	573.2	0.0%	661	-14.4	-2.0%	-4.2%	-25.4%
Momentum	2.3	0.0%	84	-5.7	-6.1%	46.2%	41.7%
<b>Total</b>	<b>9,567.6</b>	<b>0.7%</b>	<b>290,032</b>	<b>982.3</b>	<b>0.3%</b>	<b>1.9%</b>	<b>11.5%</b>
Preferreds	123.1	1.2%	6,287	-29.9	-0.5%	-0.7%	-5.0%

	\$ Traded (CAD M)	Short Int (% of SO)	AUM (CAD M)	1-Week C/R (CAD M)	Net C/R (% AUM)		
					1-Week	1-Month	1-Year
Financials	1,559.2	0.4%	15,976	577.1	3.7%	4.5%	10.4%
Communications	1.2	0.6%	45	1.6	3.5%	5.6%	36.8%
Real Estate	88.7	0.6%	2,917	6.4	0.2%	3.0%	0.9%
Utilities	188.0	0.3%	4,600	8.8	0.2%	2.1%	12.0%
Industrials	3.2	0.0%	167	0.3	0.2%	4.1%	-11.2%
Thematic	97.7	0.2%	12,814	22.0	0.2%	0.7%	33.9%
Energy	449.7	3.9%	4,143	1.7	0.0%	-2.1%	-16.3%
Cons. Discretionary	-	0.0%	385	0.1	0.0%	2.3%	49.1%
Consumer Staples	6.4	0.1%	238	-	-	-0.5%	-14.0%
Health Care	49.5	0.0%	3,477	-0.3	-0.0%	0.5%	8.0%
Info Tech	131.7	0.0%	5,672	-22.5	-0.4%	1.4%	39.1%
Materials	238.5	0.8%	2,508	-17.2	-0.7%	3.5%	-2.2%
<b>Sector Subtotal</b>	<b>2,813.8</b>	<b>0.7%</b>	<b>52,941</b>	<b>577.9</b>	<b>0.4%</b>	<b>1.2%</b>	<b>8.4%</b>

### Last Week's Net Creations/Redemptions by Geography

Investors continue favouring US equities over Canada & EM

	\$ Traded (CAD M)	Short Int (% of SO)	AUM (CAD M)	1-Week C/R (CAD M)	Net C/R (% AUM)		
					1-Week	1-Month	1-Year
United States	3,277.8	0.4%	104,645	546.7	0.5%	2.3%	12.7%
Global/International	1,325.5	0.3%	71,335	179.9	0.2%	2.2%	11.9%
Canada	4,621.9	1.4%	94,106	218.5	0.2%	1.3%	7.8%
DM Regional/Country	310.7	0.1%	16,091	33.3	0.2%	1.1%	8.8%
EM Regional/Country	27.4	0.0%	3,855	3.8	0.1%	-0.9%	195.6%
<b>Total</b>	<b>9,563.2</b>	<b>0.7%</b>	<b>290,032</b>	<b>982.3</b>	<b>0.3%</b>	<b>1.9%</b>	<b>11.5%</b>

## FIXED INCOME, CURRENCIES AND COMMODITIES FUND FLOWS

### Last Week's Net Creations/Redemptions by Strategy & Term/Rating

Investors bought quality univ and ultra-short to mid maturities. Sold long-term, Gov, cash

	\$ Traded (CAD M)	Short Int (% of SO)	AUM (CAD M)	1-Week C/R (CAD M)	Net C/R (% AUM)		
					1-Week	1-Month	1-Year
Aggregate	3143.6	0.2%	57,278	859.0	1.5%	0.7%	23.0%
Target Date	42.2	0.1%	1,634	20.0	1.2%	2.8%	159.0%
Corporate	284.8	0.5%	25,173	36.5	0.1%	1.2%	6.8%
Bank Loans	11.3	0.1%	1,024	0.3	0.0%	0.7%	-2.2%
Convertible	1.0	0.0%	141	-0.5	-0.3%	-0.9%	-11.1%
Inflation Protected	9.4	0.1%	1,068	-5.4	-0.5%	-1.6%	-20.0%
Government	649.6	0.1%	17,792	-227.4	-1.3%	-0.8%	19.6%
<b>FI Subtotal</b>	<b>4,141.9</b>	<b>0.3%</b>	<b>104,110</b>	<b>682.6</b>	<b>0.7%</b>	<b>1.5%</b>	<b>19.6%</b>
Commodity	629.7	0.3%	3,013	1.1	0.0%	1.7%	-2.5%
Cash/Currency	1654.1	0.5%	21,758	-645.8	-2.9%	-3.8%	15.4%
<b>FICC Total</b>	<b>6,425.7</b>		<b>128,880</b>	<b>38.0</b>	<b>0.0%</b>		

	\$ Traded (CAD M)	Short Int (% of SO)	AUM (CAD M)	1-Week C/R (CAD M)	Net C/R (% AUM)		
					1-Week	1-Month	1-Year
IG BBB or higher	1010.9	0.5%	42,989	604.0	1.4%	3.0%	23.1%
IG A or Higher	1556.2	0.1%	52,359	79.2	0.2%	0.1%	14.4%
High Yield	37.9	0.1%	8,762	-0.7	-0.0%	3.0%	38.1%
<b>FI Total</b>	<b>2,605.0</b>	<b>0.3%</b>	<b>104,110</b>	<b>682.6</b>	<b>0.7%</b>	<b>1.5%</b>	<b>19.6%</b>

	\$ Traded (CAD M)	Short Int (% of SO)	AUM (CAD M)	1-Week C/R (CAD M)	Net C/R (% AUM)		
					1-Week	1-Month	1-Year
Ultra Short	724.6	0.4%	7,409	387.7	5.5%	9.4%	120.2%
Short-Term	468.2	0.1%	14,208	220.6	1.6%	1.9%	-7.6%
Mixed	727.9	0.4%	55,577	239.7	0.4%	1.1%	20.5%
Intermediate	191.8	0.1%	15,731	57.6	0.4%	-0.5%	11.5%
Long-Term	492.5	0.1%	11,183	-223.0	-1.9%	1.0%	37.1%
<b>FI Total</b>	<b>2,605.0</b>	<b>0.3%</b>	<b>104,110</b>	<b>682.6</b>	<b>0.7%</b>	<b>1.5%</b>	<b>19.6%</b>

### Last Week's Net Commodity-Linked Creations/Redemptions

Silver and crude see selling, while gold & nat gas are bought.

	\$ Traded (CAD M)	Short Int (% of SO)	AUM (CAD M)	1-Week C/R (CAD M)	Net C/R (% AUM)		
					1-Week	1-Month	1-Year
Natural Gas	395.3	0.4%	211	2.9	1.4%	7.7%	42.8%
Crude Oil	126.9	0.5%	175	-6.3	-3.4%	-9.0%	-20.6%
<b>Energy Subtotal</b>	<b>522.2</b>	<b>0.4%</b>	<b>387</b>	<b>-3.4</b>	<b>-0.9%</b>	<b>-0.3%</b>	<b>12.4%</b>
Gold	50.7	0.3%	2,094	9.7	0.5%	1.8%	-7.5%
Silver	55.2	0.1%	380	-5.6	-1.5%	-1.1%	-6.2%
<b>Broad Based</b>	<b>1.6</b>	<b>0.0%</b>	<b>152</b>	<b>0.5</b>	<b>0.3%</b>	<b>12.4%</b>	<b>37.9%</b>
<b>Commodity Total</b>	<b>629.7</b>	<b>0.3%</b>	<b>3,013</b>	<b>1.1</b>	<b>0.0%</b>	<b>1.7%</b>	<b>-2.5%</b>



## CRYPTOCURRENCY FUND FLOWS

### Last Week's Net Creations/Redemptions by Strategy

Bitcoin ETFs see outsized buying, are BTC investors buying the dip?

	\$ Traded (CAD M)	Short Int (% of SO)	AUM (CAD M)	1-Week C/R (CAD M)	Net C/R (% AUM)		
					1-Week	1-Month	1-Year
Bitcoin	368.9	0.5%	4,749	68.3	1.4%	1.2%	29.1%
Multi-Crypto	2.5	0.3%	58	0.5	0.8%	0.2%	-12.0%
Ether	170.7	0.9%	1,466	-47.0	-3.0%	-5.7%	3.7%
<b>Total</b>	<b>542.1</b>	<b>0.6%</b>	<b>6,273</b>	<b>21.7</b>	<b>0.3%</b>	<b>-0.6%</b>	<b>20.0%</b>

## ACTIVE STRATEGIES FUND FLOWS

### Last Week's Net Creations/Redemptions by Strategy

Proprietary and Smart Beta active strategies remain unfavoured in 2024

	\$ Traded (CAD M)	Short Int (% of SO)	AUM (CAD M)	1-Week C/R (CAD M)	Net C/R (% AUM)		
					1-Week	1-Month	1-Year
True Active	1,813.1	0.1%	82,038	590.8	0.7%	2.6%	20.4%
Mixed Allocation	345.1	0.0%	15,699	98.5	0.6%	3.0%	25.4%
Dividend/Income	338.6	0.1%	11,684	10.2	0.1%	2.3%	26.9%
Factor/Multi-Factor	135.6	0.1%	7,854	4.9	0.1%	2.9%	21.5%
Smart Beta	4.1	0.0%	652	-0.5	-0.1%	0.9%	-19.7%
Proprietary	93.0	0.1%	2,708	-72.6	-2.6%	0.1%	-13.1%
<b>Total</b>	<b>2,729.4</b>	<b>0.1%</b>	<b>120,636</b>	<b>631.3</b>	<b>0.5%</b>	<b>3.2%</b>	<b>19.6%</b>

### Last Week's Net Creations/Redemptions by Provider

Crypto ETFs from 3iQ saw the largest inflows (as % of AuM)

	# of Crypto ETFs	AUM (CAD M)	Market Share	Net C/R (CAD M)	Net C/R (% AUM)		
					1-Week	1-Month	1-Year
Purpose	13	3,046	48.6%	13.6	0.4%	-2.1%	4.8%
CI ETFs	6	2,025	32.3%	-45.8	-2.1%	-1.9%	24.4%
Fidelity	3	478	7.6%	2.9	0.6%	6.6%	343.3%
Evolve	6	325	5.2%	-2.5	-0.7%	-3.8%	-11.6%
3iQ	2	377	6.0%	53.7	16.0%	16.3%	19.9%
Horizons	1	21	0.3%	-0.3	-1.3%	3.5%	5.6%
<b>Total</b>	<b>31</b>	<b>6,273</b>	<b>100.0%</b>	<b>21.7</b>	<b>0.3%</b>	<b>-0.6%</b>	<b>20.0%</b>

### Last Week's Net Creations/Redemptions by Asset Class

Within active, fixed income and mixed allocation ETFs were broadly bought

	\$ Traded (CAD M)	Short Int (% of SO)	AUM (CAD M)	Net C/R (CAD M)	Net C/R (% AUM)		
					1-Week	1-Month	1-Year
Fixed Income	1,097.3	0.1%	37,256	415.4	1.1%	3.5%	29.9%
Mixed Allocation	309.1	0.0%	15,981	99.1	0.6%	2.6%	26.1%
Specialty/Alternative	101.1	0.2%	3,947	6.9	0.2%	0.7%	9.3%
Equity	1,218.1	0.1%	63,234	109.6	0.2%	2.1%	14.6%
Commodity	3.8	0.0%	217	0.2	0.1%	7.0%	18.4%
<b>Total</b>	<b>2,729.4</b>	<b>0.1%</b>	<b>120,636</b>	<b>631.3</b>	<b>0.5%</b>	<b>3.2%</b>	<b>19.6%</b>

## ESG-FOCUSED FUND FLOWS

### Last Week's Net Creations/Redemptions by ESG Attribute

A handful of ESG ETFs drove ESG activity (once again)

	\$ Traded (CAD M)	Short Int (% of SO)	AUM (CAD M)	1-Week C/R (CAD M)	Net C/R (% AUM)		
					1-Week	1-Month	1-Year
Clean Energy	1.4	0.6%	110	1.2	1.0%	0.3%	0.9%
Broad ESG	75.5	0.0%	14,273	30.4	0.2%	0.4%	53.2%
Socially Responsible	13.7	0.0%	1,402	1.6	0.1%	1.5%	9.9%
Climate Change	1.6	0.1%	121	-	-	0.0%	-4.3%
Env. Friendly	101.8	0.0%	1,496	-86.2	-5.3%	3.8%	-0.2%
<b>Total</b>	<b>194.0</b>	<b>0.2%</b>	<b>17,401</b>	<b>-53.0</b>	<b>-0.3%</b>	<b>1.2%</b>	<b>11.9%</b>



### PROVIDER MARKET SHARE

40 Providers have total AuM of C\$451B (+21% YoY)

Providers	# of ETFs	AUM (CAD M)	Market Share	Net C/R (% AUM)		
				1-Week	1-Month	1-Year
iShares	161	117,090	26.0%	0.2%	1.4%	12.0%
BMO GAM	193	103,104	22.9%	0.8%	1.6%	4.9%
Vanguard	37	69,084	15.3%	0.8%	2.4%	16.5%
Horizons	111	31,879	7.1%	-0.1%	-0.6%	17.5%
CI ETFs	125	20,834	4.6%	-1.0%	-0.7%	4.5%
TD AM	54	14,187	3.1%	0.4%	3.9%	35.4%
Mackenzie	53	13,538	3.0%	0.1%	1.1%	-1.5%
National Bank	16	11,751	2.6%	0.1%	1.1%	27.0%
Purpose	70	10,336	2.3%	-3.4%	-4.5%	12.1%
Fidelity	50	8,671	1.9%	1.4%	8.3%	107.6%
RBC GAM	52	6,816	1.5%	0.6%	1.8%	52.0%
Invesco	59	6,085	1.4%	-0.2%	0.6%	12.5%
1832 Asset Management	30	5,476	1.2%	0.3%	3.3%	39.3%
Hamilton Capital	20	4,623	1.0%	0.2%	2.7%	92.0%
Other (26)	337	27,084	6.0%	0.3%	1.2%	13.7%
<b>Total</b>	<b>1,368</b>	<b>450,558</b>	<b>100.0%</b>	<b>0.2%</b>	<b>1.4%</b>	<b>13.7%</b>

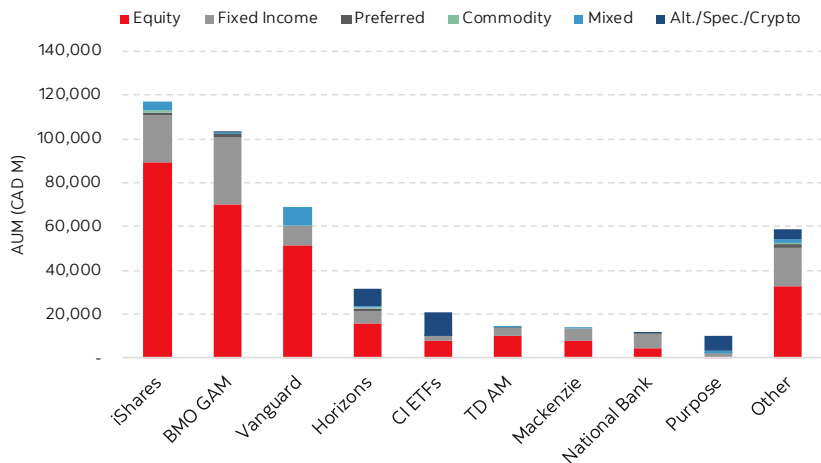
### LAST WEEK'S LARGEST NET CREATIONS/REDEMPTIONS BY PROVIDER

Fidelity and 1832 gathered the most assets (as % AUM) last week

Providers	Average Fund Size (CAD M)	AUM (CAD M)	Net C/R (CAD M)	Net C/R (% AUM)		
				1-Week	1-Month	1-Year
3iQ	188.5	377.0	53.7	16.0%	16.3%	19.9%
Forstrong ETFs	3.3	13.2	0.5	3.9%	3.9%	N/A
Arrow Capital	16.5	66.0	2.5	3.9%	6.0%	45.1%
CIBC AM	124.2	3,354.2	89.6	2.7%	7.4%	23.2%
Traluent ETFs	4.8	4.8	0.1	2.1%	6.7%	N/A
Fidelity	173.4	8,670.5	121.6	1.4%	8.3%	107.6%
FT Portfolio	16.3	439.9	4.3	1.0%	4.7%	4.9%
BMO GAM	534.2	103,104.1	864.0	0.8%	1.6%	4.9%
Desjardins	91.0	2,185.1	-83.9	-3.7%	-0.1%	26.1%
Accelerate Financial	17.5	69.9	-2.5	-3.5%	-2.6%	0.1%
Purpose	147.7	10,336.5	-522.8	-3.4%	-4.5%	12.1%
Ninepoint	95.8	1,053.5	-11.7	-1.0%	-6.9%	-26.5%
CI ETFs	166.7	20,834.2	-302.8	-1.0%	-0.7%	4.5%
Royal Canadian Mint	350.1	700.2	-4.0	-0.6%	-0.6%	-3.4%
Evolve	64.0	3,393.7	-27.5	-0.5%	-1.1%	11.6%
Lysander	29.0	87.0	-0.5	-0.5%	-0.4%	0.0%

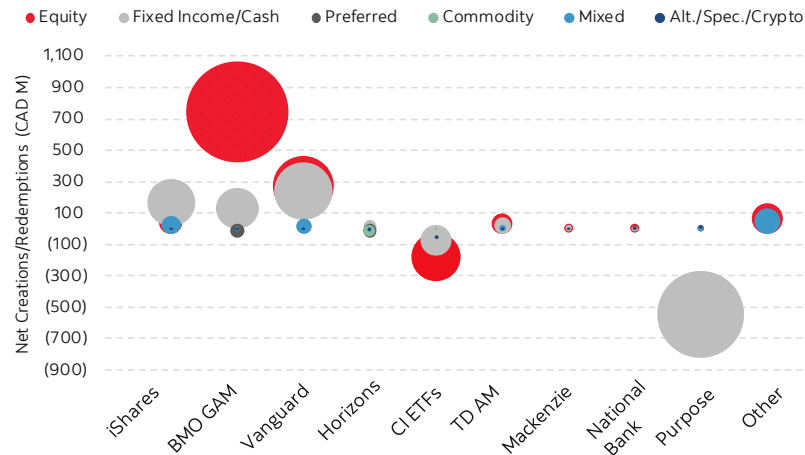
### ASSET MIX BY PROVIDER

The five largest providers now account for <76% of the ETF Canadian landscape



### WEEKLY CREATIONS/REDEMPTIONS BY ASSET CLASS

The "Big Three" dominate fixed income Creations, but BMO clearly leads equity creates



# Contacts

## Alex Perel, CFA

MD & Head of ETF services  
416.862.3158  
Scotia Capital Inc. Canada  
alex.perel@scotiabank.com

## Daniela Fajardo, MBA

Associate Director, ETF Services  
416.860.1023  
Scotia Capital Inc. Canada  
daniela.fajardogarcia@scotiabank.com

## Morley Conn, CFA

Director, ETF Services  
416.863.7882  
Scotia Capital Inc. Canada  
morley.conn@scotiabank.com

## Danielle Tygesen

Analyst, ETF Services  
416.863.5902  
Scotia Capital Inc. Canada  
danielle.tygesen@scotiabank.com

© The Bank of Nova Scotia 2023

To unsubscribe from this specific note/publication, email [etfcommentary@scotiabank.com](mailto:etfcommentary@scotiabank.com)

TM Trademark of The Bank of Nova Scotia. Used under license, where applicable. Scotiabank, together with "Global Banking and Markets", is a marketing name for the global corporate and investment banking and capital markets businesses of The Bank of Nova Scotia and certain of its affiliates in the countries where they operate, including Scotia Capital Inc., Scotia Capital (USA) Inc., Scotiabanc Inc., Citadel Hill Advisors L.L.C., The Bank of Nova Scotia Trust Company of New York, Scotiabank Europe plc, Scotiabank (Ireland) Designated Activity Company, Scotiabank Inverlat S.A., Institución de Banca Múltiple, Scotia Inverlat Casa de Bolsa S.A. de C.V., Scotia Inverlat Derivados S.A. de C.V. – all members of the Scotiabank Group and authorized users of the mark. The Bank of Nova Scotia is incorporated in Canada with limited liability. Scotia Capital Inc. is a member of CIPF. Scotia Capital (USA) Inc. is a registered broker-dealer with the SEC and is a member of the NASD and SIPC. The Bank of Nova Scotia is authorised and regulated by the Office of the Superintendent of Financial Institutions of Canada. Scotia Capital Inc. is authorised and regulated by the Investment Industry Regulatory Organization of Canada. The Bank of Nova Scotia (London) and Scotiabank Europe plc. are authorised by the UK Prudential Regulation Authority. The Bank of Nova Scotia is subject to regulation by the UK Financial Conduct Authority and limited regulation by the UK Prudential Regulation Authority. Scotiabank Europe plc is regulated by the UK Financial Conduct Authority and the UK Prudential Regulation Authority. Details about the extent of The Bank of Nova Scotia's regulation by the UK Prudential Regulation Authority are available upon request. Scotiabank (Ireland) Designated Activity Company is authorised and regulated by the CBI Scotiabank Inverlat, S.A., Scotia Inverlat Casa de Bolsa, S.A. de C.V., and Scotia Derivados, S.A. de C.V., are each authorized and regulated by the Mexican financial authorities.

This publication is not a research report and is considered a marketing communication only. Consequently this commentary is not governed by rules applicable to the publication and distribution of research reports, including relevant restrictions or disclosures required to be included in research reports and has not been prepared in accordance with EU legal requirements designed to promote the independence of investment research. This publication is not meant to provide information sufficient upon to base an investment decision, or to replace any due diligence or analytical work required by you in making investment decisions. The information contained in this publication is not subject to any prohibition in the EU on dealing ahead of the dissemination of investment research. This communication has been prepared and distributed by staff of Scotia Capital Inc.'s Institutional Equity Sales and Trading Desk (a Canadian Investment Dealer, member of IIROC solely for the use of sophisticated institutional investors. Past performance or simulated past performance is not a reliable indicator of future results. Forecasts are not a reliable indicator of future performance. The opinions and statements contained herein are intended for information purposes only and are subject to change without notice. In addition, the opinions and statements contained herein are based on information taken from sources believed to be reliable, but no representation or warranty, express or implied, is made as to their accuracy, completeness, or timeliness. Furthermore, the opinions expressed herein represent the personal views of the writer and may not be shared by other members of the Institutional Equity Desk or other areas, units, divisions or affiliates of Scotia Capital Inc. Additionally, either the Institutional Equity Desk or other areas or divisions could trade in accordance with the views expressed or trade against these views. Any transactions by US Institutional Investors in any security mentioned or referenced in this publication cannot be effected through Scotia Capital Inc. and must be executed with a U.S. broker-dealer, including Scotia Capital (USA) Inc., an affiliate of Scotia Capital Inc. Scotia Capital (USA) Inc. is a registered broker-dealer with the SEC and is a member of FINRA, the NYSE and SIPC.

Scotia Capital Inc., its directors, officers, employees, affiliates or clients may currently or from time to time own or hold interests in long or short positions in the securities referred to herein, and may at any time make purchases or sales of these securities as principal or agent. Scotia Capital Inc. or its affiliates may have provided or may provide investment banking, capital markets advice or other services to the companies referred to in this communication. This email should not be construed as investment advice or as an offer to sell or a solicitation of an offer to buy any securities or other financial instruments. Neither Scotia Capital Inc. nor any of its officers, directors, partners, employees or affiliates accepts any liability for any direct or consequential loss arising from this publication or its contents. Scotia Capital Inc. recommends that investors independently evaluate each issuer and security discussed in this publication, and consult with any advisors they deem necessary prior to making any investment.

**If you are subject to the prohibition on third-party benefits in relation to portfolio management and independent investment advice under MIFID II (Directive 2014/65/EU and the accompanying Regulation (EU) No 600/2014) or the UK Markets in Financial Instruments (Amendment)(EU Exit) Regulations 2018, each as amended from time to time, and should not have received this communication, please advise us in writing at [trade-supervision@scotiabank.com](mailto:trade-supervision@scotiabank.com)**

**Redistribution or onward forwarding of this email is strictly prohibited.** If you believe that this email was sent to you in error, please forward a message to that effect as soon as practicable to [trade.supervision@scotiabank.com](mailto:trade.supervision@scotiabank.com)

**The information is not advice, a recommendation, or an offer.** The information provided herein is intended for general circulation and does not take into account specific investment objectives, financial circumstances or the particular needs of any recipient. It does not constitute an offer or solicitation to buy or sell or subscribe for any security or financial instrument or investment product, or to enter into a transaction or participate in any particular trading or investment strategy.

**The information is not for Retail; no assurances as to results.** Trading in securities involves risks, including the risk of loss. This document and the products and strategies described herein (collectively, the "Products") are intended for use only by sophisticated professional and institutional investors as may be defined in the respective jurisdictions. Investors should consult their financial, legal and tax advisors and determine that the Products are suitable for their risk tolerance and investment objectives prior to engaging in any activity related to the Products. Scotiabank cannot provide any assurances that the Products will achieve their intended results or that the Products will outperform other similar products or strategies. While this document describes how the Products are intended to work under normal market conditions, the actual performance of the Products may not achieve their intended results, particularly during periods of unusually high volatility, unusually low liquidity and/or other extraordinary market conditions. Nothing in this document should be construed as tax or investment advice and no description of the Products-related transactions. If there are any matters arising from, or in connection with the materials, investors should contact their Scotiabank representative to seek further clarification.

IGBM&T does not deal with retail clients.