

## October 2022: ETFs surge back to the \$300 billion milestone

- Canadian ETFs gathered \$2.6 billion in October, bringing AUM back to the \$300 billion threshold
- Cash Alternative ETFs continued its haul, pulling in another \$1 billion
- Equity ETFs also enjoyed inflows, with U.S. equity ETFs in the lead
- 11 new ETFs launched in October, six in the burgeoning “lightly levered” category

**Summary:** Canadian ETFs gathered \$2.6 billion in net flows in October, with Fixed Income ETFs dominating most of the new creations. That said, equity ETFs still saw inflows of \$676 million, most of which went to products offering exposure to the U.S. (\$539 million), while Canada and International equity ETFs also had small inflows.

Fixed Income ETFs enjoyed inflows of \$1.8 billion led by cash alternative ETFs, which once again pulled in \$1 billion in a single month. The “adjacent” category of “Ultra short-term” bond ETFs also registered significant inflows of \$632 million. Preferred share, U.S./North America bond, and foreign bond ETFs suffered outflows.

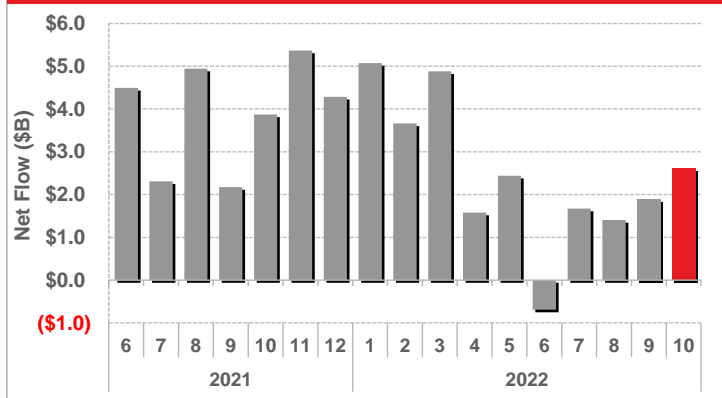
Commodity ETFs suffered minor redemptions, while Multi-Asset and Crypto-Asset ETFs welcomed small inflows. Overall, ETF flow patterns in October show that investor sentiment has improved relative to the extreme defensiveness in September, but investors are still playing defense using cash alternative and ultra-short term Fixed Income products.

### Flows by Asset Class, Category and Product: (Table 1 & Tables 5 - 12)

Equity ETFs took in \$676 million in October. In addition to broad market ETFs particularly for the U.S. region (VSP, XSP, XQQ, ZUE), ESG ETFs (NSCE) continued to have inflows, and an actively managed U.S. mid-cap ETF (Dynamic’s DXZ) climbed the leaderboard with \$108 million created. Demand for Canadian equity exposure and the related energy sector trade (which both fuelled so much of the flows and performance this year) are starting to fade - Canada’s bellwether energy sector ETF (iShares XEG) suffered \$119 million outflows and broad Canadian equity ETFs (HXCN, XIC, CCEI, VCE) all appeared on the outflow leaderboard in October. The insatiable demand for dividend/income strategy products also seems to be waning; this category showed a small outflow of \$13 million last month, a break from its year-long inflow trend.

**Chart 1: Canadian ETF Flows by Month**

Source: National Bank Financial, Bloomberg



**Table 1 - ETF Flows by Category - YTD Oct 2022**

	AUM (\$M)	Mkt Shr (%)	Oct 2022		YTD Oct 2022	
			Flow \$M	Flow/AUM	Flow \$M	Flow/AUM
Equity	\$191,316		\$676	0.4%	\$10,219	4.5%
Canada	\$73,027	24%	\$25	0.0%	\$3,187	4.0%
United States	\$66,990	22%	\$539	0.9%	\$3,471	4.3%
International	\$51,300	17%	\$112	0.2%	\$3,562	5.5%
Fixed Income	\$88,175	29%	\$1,750	2.0%	\$10,816	11.2%
Commodities	\$1,394	0%	-\$58	-4.0%	-\$371	-19.4%
Multi-Asset	\$15,620	5%	\$107	0.7%	\$1,873	11.9%
Inverse / Levered	\$2,736	1%	\$126	5.0%	\$1,284	70.1%
Crypto-Asset	\$2,223	1%	\$9	0.4%	-\$31	-0.5%
<b>Total</b>	<b>\$301,463</b>	<b>100%</b>	<b>\$2,610</b>	<b>0.9%</b>	<b>\$23,791</b>	<b>6.9%</b>

\*Equity Flows include option strategies;

Source: National Bank of Canada, Bloomberg

Fixed Income ETF flows continue to show clear signs of flight-to-safety. Cash alternative ETFs raked in \$1.1 billion, bringing the category's AUM to more than \$12 billion, almost twice the level of where its assets stood at the end of last year. Three "high-interest savings" ETFs from different providers (CSAV, PSA, CASH) all showed up on the top inflow leaderboard last month. Ultra-short-term bond products with minimal duration and credit risk (ZST, ZMMK, PFL) welcomed inflows as well. On the other end of the fixed income risk spectrum, U.S./North America bonds, foreign bonds, and preferred share ETFs suffered redemptions.

Outflows of \$58 million from Commodities ETFs were driven by redemptions from gold ETFs (CGL/C). The flows in all the other categories were flat on the month.

**Flows by Provider and New Launches (Table 2 - 3):**

A majority of ETF issuers in Canada enjoyed positive flows in October, while Horizons, CIBC, AGF and Harvest had outflows (without adjustments for ETF cross-holdings, Harvest would have had inflows).

11 new ETFs launched in October, and six of them apply cash leverage of 25% or 33%. The other new strategies include target date bond ETFs and long/short market neutral ETFs.

**Canadian ESG ETF Flows (Table 4):** Inflows to ESG ETF picked up in October after two months of muted creation activity. ESG ETFs had net inflows of \$166 million, mostly contributed by institutional-sized creations to NBI Sustainable Canadian Equity ETF (NSCE). This product is now the second-largest ESG ETF in Canada (behind BMO's

**Table 2 - ETF Flows by Provider - Oct 2022**

Provider	New Methodology (adjusted for ETF-of-ETFs)			Unadjusted		
	AUM (\$M)	Mkt Shr (%)	Oct 2022 Flow (\$M)	Oct 2022 Flow/AUM	Oct 2022 AUM (\$M)	Oct 2022 Flow (\$M)
1 RBC iShares	\$88,848	29.5%	\$572	1%	\$94,159	\$578
2 BMO	\$75,837	25.2%	\$371	1%	\$83,770	\$467
3 Vanguard	\$39,025	12.9%	\$200	1%	\$47,952	\$230
4 Horizons	\$20,820	6.9%	-\$226	-1%	\$21,361	-\$222
5 CI First Asset	\$14,044	4.7%	\$385	3%	\$14,204	\$395
6 Mackenzie*	\$11,588	3.8%	\$81	1%	\$11,812	\$81
7 TDAM	\$7,732	2.6%	\$68	1%	\$7,810	\$61
8 NBI	\$6,225	2.1%	\$237	4%	\$6,225	\$237
9 Purpose	\$6,058	2.0%	\$482	9%	\$6,323	\$484
10 Invesco	\$4,475	1.5%	\$136	3%	\$4,495	\$136
11 Fidelity	\$2,810	0.9%	\$43	2%	\$3,032	\$73
12 CIBC	\$2,457	0.8%	-\$94	-4%	\$2,465	-\$95
13 Manulife	\$2,381	0.8%	\$55	2%	\$2,381	\$55
14 Harvest	\$2,343	0.8%	-\$19	-1%	\$2,685	\$19
15 Dynamic	\$2,183	0.7%	\$51	3%	\$2,183	\$51
16 Evolve Funds	\$2,021	0.7%	\$54	3%	\$2,076	\$54
17 PIMCO	\$1,984	0.7%	\$28	1%	\$1,984	\$28
18 Desjardins	\$1,707	0.6%	\$42	3%	\$1,707	\$42
19 Hamilton	\$1,378	0.5%	\$95	8%	\$1,763	\$109
20 Franklin Templeton	\$1,281	0.4%	\$14	1%	\$1,281	\$14
21 AGF	\$1,122	0.4%	-\$26	-2%	\$1,122	-\$26
22 Scotia Bank	\$1,111	0.4%	\$42	4%	\$1,111	\$42
23 Ninepoint Partners	\$728	0.2%	-\$2	0%	\$728	-\$2
24 Picton Mahoney	\$609	0.2%	\$21	4%	\$609	\$21
25 Brompton Funds	\$425	0.1%	\$1	0%	\$487	\$2
26 First Trust	\$410	0.1%	\$7	2%	\$410	\$7
27 Middlefield	\$409	0.1%	-\$2	-1%	\$409	-\$2
28 3iQ	\$353	0.1%	-\$1	0%	\$353	-\$1
29 Bristol Gate	\$297	0.1%	-\$3	-1%	\$297	-\$3
30 Guardian Capital	\$221	0.1%	\$1	0%	\$221	\$1
31 Emerge	\$126	0.0%	\$3	2%	\$126	\$3
32 IA Clarington	\$106	0.0%	-\$4	-4%	\$106	-\$4
33 Lysander	\$85	0.0%	\$0	0%	\$85	\$0
34 Accelerate	\$62	0.0%	-\$1	-1%	\$68	-\$1
35 Mulvihill	\$48	0.0%	\$3	8%	\$48	\$3
36 Russell Investments	\$44	0.0%	\$0	1%	\$44	\$0
37 Arrow Capital	\$37	0.0%	\$0	0%	\$37	\$0
38 Starlight	\$26	0.0%	-\$5	-17%	\$26	-\$5
39 SmartBe	\$24	0.0%	\$0	0%	\$24	\$0
40 Evermore Capital	\$14	0.0%	\$4	38%	\$14	\$4
41 NCM Investments	\$5	0.0%	\$0	0%	\$5	\$0
42 Caldwell	\$5	0.0%	\$0	0%	\$5	\$0
<b>Total</b>	<b>\$301,463</b>	<b>100.0%</b>	<b>\$2,610</b>	<b>0.9%</b>	<b>\$326,002</b>	<b>\$2,832</b>

\*Includes Wealthsimple asset and flows. Source: NBF, Bloomberg

**Table 3: Newly launched ETFs - September 2022**

Name	Ticker	Mgmt Fee (%)	Focus
1 Harvest Brand Leaders Enhanced Income ETF	HBFE	0.85	
2 Harvest Equal Weight Global Utilities Enhanced Income Etf	HUTE	0.70	
3 Harvest Tech Achievers Enhanced Income ETF	HTAE	0.88	1.25X leverage
4 Harvest Canadian Equity Enhanced Income Leaders ETF	HLFE	0.65	
5 Harvest Healthcare Leaders Enhanced Income ETF	HHLE	0.88	
6 RBC Target 2029 Corporate Bond Index ETF	RQR	0.25	Target date bond
7 RBC Target 2028 Corporate Bond Index ETF	RQQ	0.25	Target date bond
8 Brompton Enhanced Multi-Asset Income ETF	BMAX	0.83	1.33X leverage
9 Desjardins Alt Long/short Global Equity Markets Etf	DAMGJU	1.00	
10 Desjardins Alt Long/short Global Equity Markets Etf	DAMG	1.00	Market neutral
11 Desjardins Alt Long/Short Equity Market Neutral ETF	DANCU	1.00	Market neutral

Source: NBF ETF Research, SEDAR, ETF Providers. Data as of October 31, 2022

ESGY) having pulled in over \$800 million this year and reaching \$1.2 billion in AUM at the end of October. While many ESG ETFs suffered from underperformance this year due to lower allocation to energy stocks, NSCE outperformed the S&P/TSX Composite index by 3.9% year-to-date, despite having zero energy or utilities exposures. The sub-advisor Fiera Capital actively screens for quality and value companies with an additional “sustainability” filter.

**Table 4: Canada-Listed ESG ETFs - October 2022**

Category	AUM (\$M)	AUM (%)	October 2022		Jan - Oct 2022	
			Flow (\$M)	Flow/AUM	Flow (\$M)	Flow/AUM
Equity	\$8,602	83%	\$179	2.2%	\$1,752	21.4%
Broad - Canada	\$2,234	22%	\$123	6.1%	\$899	58.7%
Broad - U.S.	\$2,200	21%	\$2	0.1%	\$351	15.4%
Broad - DM	\$1,193	12%	\$1	0.1%	\$176	13.3%
Broad - EM	\$274	3%	-\$3	-1.1%	-\$2	-0.5%
Broad - Global	\$1,192	12%	-\$1	-0.1%	\$203	17.4%
Environment	\$969	9%	\$47	5.3%	-\$30	-2.5%
Clean Energy	\$319	3%	\$8	2.7%	\$176	102.9%
Social	\$151	1%	\$0	0.0%	-\$12	-6.1%
Infrastructure	\$70	1%	\$3	3.8%	-\$10	-93.1%
Commodities	\$13	0%	-\$2	-13.8%	\$13	NA
Multi-Asset	\$146	1%	\$0	0.1%	\$28	19.7%
Fixed Income	\$1,549	15%	-\$12	-0.7%	\$709	65.4%
<b>Total Displayed</b>	<b>\$10,309</b>	<b>100%</b>	<b>\$166</b>	<b>1.7%</b>	<b>\$2,502</b>	<b>26.5%</b>

Source: NBF ETF Research, Bloomberg. Data as of October 31, 2022

Note: the tables below all use the “new” flows calculation methodology.

Table 5 - Top Single Long ETF Inflows - Oct 2022				
Ticker	Name	Flow (\$M)	Flow/AUM	
1	ZST	BMO Ultra Short-Term Bond ETF	\$558	54%
2	XIU	iShares S&P/TSX 60 Index ETF	\$467	5%
3	VSP	Vanguard S&P 500 Index ETF CAD-hedged	\$452	24%
4	CSAV	CI High Interest Savings ETF	\$451	12%
5	PSA	Purpose High Interest Savings ETF	\$409	16%
6	ZMMK	BMO Money Market Fund ETF Series	\$302	123%
7	ZAG	BMO Aggregate Bond Index ETF	\$153	3%
8	XSP	iShares Core S&P 500 Index ETF CAD- Hedged	\$145	2%
9	HXT	Horizon S&P/TSX 60 Index ETF	\$139	4%
10	CASH	Horizons High Interest Savings ETF	\$131	23%
11	NSCE	NBI Sustainable Canadian Equity ETF	\$124	12%
12	XQQ	iShares NASDAQ 100 Index ETF CAD-Hedged	\$109	7%
13	QCB	Mackenzie Canadian All Corporate Bond Index ETF	\$109	44%
14	DXZ	Dynamic Active US Mid-Cap ETF	\$108	1833%
15	ZWU	BMO Covered Call Utilities ETF	\$84	5%
16	NHYB	NBI High Yield Bond ETF	\$83	11%
17	PFL	Invesco 1-3 Year Laddered Floating Rate Note Index ET	\$77	42%
18	XCB	iShares Core Canadian Corporat	\$75	6%
19	RCDB	RBC Canadian Discount Bond ETF	\$74	15%
20	ZUE	BMO S&P 500 Hedged to CAD Index ETF	\$67	5%

Source: National Bank of Canada, Bloomberg;

Table 6 - Top Single Long ETF Outflows - Oct 2022				
Ticker	Name	Flow (\$M)	Flow/AUM	
1	HXCN	Horizons S&P/TSX Capped Composite Index ETF	-\$540	-33%
2	ZUS/U	BMO Ultra Short-Term US Bond ETF	-\$406	-91%
3	ZSP	BMO S&P 500 Index ETF	-\$256	-3%
4	VFV	Vanguard S&P 500 Index ETF	-\$256	-4%
5	XSB	iShares Core Canadian Short Term Bond Index ETF	-\$194	-6%
6	XIC	iShares Core S&P/TSX Capped Composite Index ETF	-\$187	-2%
7	ZIC	BMO Mid-Term US IG Corporate Bond Index ETF	-\$110	-59%
8	XEG	iShares S&P/TSX Capped Energy Index ETF	-\$99	-5%
9	ZCN	BMO S&P/TSX Capped Composite Index ETF	-\$86	-1%
10	QUIG	Mackenzie US Investment Grade Corporate Bond Inde	-\$84	-18%
11	CCEI	CIBC Canadian Equity Index ETF	-\$74	-35%
12	XBB	iShares Core Canadian Universe Bond Index ETF	-\$54	-1%
13	CGL/C	iShares Gold Bullion ETF	-\$48	-17%
14	FLI	CI U.S. & Canada Lifeco Covered Call ETF	-\$47	-46%
15	DXP	Dynamic Active Preferred Shares ETF	-\$45	-9%
16	XSH	iShares Core Canadian Short Term Corporate Bond Ir	-\$44	-4%
17	ZEB	BMO Equal Weight Banks Index ETF	-\$43	-2%
18	VCE	Vanguard FTSE Canada Index ETF	-\$42	-4%
19	CAFR	CIBC Active Investment Grade Floating Rate Bond ETF	-\$38	-11%
20	HBF	Harvest Brand Leaders Plus Income ETF	-\$35	-12%

Source: National Bank of Canada, Bloomberg;

Asset Class	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Equity	\$191,316	63%	\$676	0.4%
Fixed Income	\$88,175	29%	\$1,750	2.0%
Commodities	\$1,394	0%	-\$58	-4.0%
Multi-Asset	\$15,620	5%	\$107	0.7%
Inverse / Levered	\$2,736	1%	\$126	5.0%
Crypto-Asset	\$2,223	1%	\$9	0.4%
<b>Total</b>	<b>\$301,463</b>	<b>100%</b>	<b>\$2,610</b>	<b>0.9%</b>

\*Equity Flows include option strategies; Source: National Bank of Canada, Bloomberg  
\$18,083 \$20,693

Geography	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada	\$73,027	38%	\$25	0.0%
United States	\$66,990	35%	\$539	0.9%
DM: Broad	\$18,941	10%	\$17	0.1%
DM: Regional & Country	\$5,193	3%	-\$89	-1.8%
Emerging Markets	\$4,648	2%	\$83	1.7%
Global	\$22,519	12%	\$102	0.5%
<b>Total</b>	<b>\$191,316</b>	<b>100%</b>	<b>\$676</b>	<b>0.4%</b>

\*Equity Flows include option strategies; Source: National Bank of Canada, Bloomberg

Sector	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Financials	\$9,676	36%	-\$57	-0.6%
Energy	\$3,852	15%	-\$119	-3.6%
Real Estate	\$2,855	11%	\$21	0.8%
Health Care	\$2,686	10%	-\$28	-1.1%
Technology	\$2,601	10%	\$85	3.5%
Utilities	\$2,432	9%	\$102	4.4%
Materials	\$1,873	7%	\$74	4.1%
Other	\$566	2%	\$23	5.1%
<b>Total</b>	<b>\$26,542</b>	<b>100%</b>	<b>\$102</b>	<b>0.4%</b>

\*Includes all geo focuses and Covered Call Strategies; Source: NBF, Bloomberg

Focus	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Cap-weighted	\$111,600	58%	\$255	0.2%
Dividend / Income	\$20,878	11%	-\$13	-0.1%
Factor: Low Vol	\$7,357	4%	\$5	0.1%
Factor: Multi-factor	\$2,884	2%	\$23	0.9%
Factor: Fundamental	\$4,748	2%	-\$33	-0.7%
Sector	\$26,542	14%	\$102	0.4%
Thematic	\$11,203	6%	\$178	1.7%
ESG**	\$7,262	4%	\$185	2.7%
Other	\$6,106	3%	\$158	2.8%
<b>Total</b>	<b>\$191,316</b>	<b>100%</b>	<b>\$676</b>	<b>0.4%</b>

\*Equity Flows include option strategies; Source: National Bank of Canada, Bloomberg  
\*\* Only includes ESG ETFs under Thematic category

Type	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada Aggregate	\$26,973	31%	\$353	1.3%
Canada Government	\$8,970	10%	\$258	2.9%
Canada Corporate	\$13,384	15%	\$680	5.3%
U.S. / North America	\$6,883	8%	-\$571	-7.5%
Foreign	\$9,730	11%	-\$40	-0.4%
Sub-Investment Grade	\$3,645	4%	\$56	1.6%
Preferred/Convertible	\$6,453	7%	-\$96	-1.4%
Cash Alternative	\$12,137	14%	\$1,111	10.1%
<b>Total</b>	<b>\$88,175</b>	<b>100%</b>	<b>\$1,750</b>	<b>2.0%</b>

Source: National Bank of Canada, Bloomberg

Maturity	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Broad/Mixed	\$43,133	49%	\$164	0.4%
Ultra Short Term	\$5,578	6%	\$632	12.8%
Short Term	\$16,247	18%	-\$334	-2.0%
Mid Term	\$4,455	5%	\$16	0.4%
Long Term	\$4,635	5%	\$75	1.6%
Real Return	\$1,537	2%	\$17	1.1%
Target Maturity	\$453	1%	\$68	17.7%
Cash Alternative	\$12,137	14%	\$1,111	10.1%
<b>Total</b>	<b>\$88,175</b>	<b>100%</b>	<b>\$1,750</b>	<b>2.0%</b>

Source: National Bank of Canada, Bloomberg

**YTD October 2022 Flow (Table 13 - 21):**

Canadian ETFs managed to receive net inflows of \$24 billion in 2022 year-to-date. Creations have been divided between the equity and fixed income asset classes, with each gathering more than \$10 billion apiece. Despite the fact that inflation fears have been dominating conversations and headlines, Commodity ETFs in Canada had small *outflows* of \$371 million year-to-date, primarily from gold ETFs.

Multi-Asset ETFs welcomed \$1.9 billion in flows, with steady contributions from investors every month. Crypto-asset ETF flows are almost flat on the year with \$31 million redeemed on a net basis, although this activity can wax and wane depending on the underlying price action in bitcoin and Ethereum, which is famously volatile and risky.

Within equity ETFs, the U.S. is leading the charge again with \$3.5 billion created, \$284 million more than the net flows that have gone to Canada. Emerging Market ETFs are the only regional equity category with net outflows (\$261 million). Low volatility factor and multi-factor ETFs each saw outflows of more than \$900 million YTD.

In a year with rapidly rising interest rates and widening credit spreads, cash alternative ETFs have overtaken Canadian aggregate bond ETFs in terms of YTD inflows. Cash alternative ETFs gathered \$5.9 billion, or \$2 billion more than the inflows accumulated by Canadian aggregate bond ETFs. Categories with higher credit exposure such as sub-investment grade bonds, preferred share suffered outflows.



Tables continue on the next page

**Table 13 - Top ETF Inflows - YTD Oct 2022**

Ticker	Name	Flow (\$M)	Flow/AUM
1	<b>CSAV</b> CI High Interest Savings ETF	\$1,995	96%
2	<b>PSA</b> Purpose High Interest Savings ETF	\$1,317	72%
3	<b>TCLB</b> TD Canadian Long Term Federal Bond ETF	\$1,161	395%
4	<b>HXT</b> Horizon S&P/TSX 60 Index ETF	\$1,092	38%
5	<b>VFV</b> Vanguard S&P 500 Index ETF	\$992	15%
6	<b>ESGY</b> BMO MSCI USA ESG Leaders Index ETF	\$990	109%
7	<b>HBB</b> Horizons Cdn Select Universe Bond ETF	\$968	62%
8	<b>ZST</b> BMO Ultra Short-Term Bond ETF	\$907	128%
9	<b>ZMU</b> BMO Mid-Term US IG Corporate Bond Hedged to CAD	\$882	47%
10	<b>NSCE</b> NBI Sustainable Canadian Equity ETF	\$861	242%
11	<b>VSP</b> Vanguard S&P 500 Index ETF CAD-hedged	\$822	39%
12	<b>XIU</b> iShares S&P/TSX 60 Index ETF	\$806	7%
13	<b>XSP</b> iShares Core S&P 500 Index ETF CAD- Hedged	\$779	9%
14	<b>CASH</b> Horizons High Interest Savings ETF	\$715	4401%
15	<b>HISA</b> High Interest Savings Account Fund	\$701	267%
16	<b>VEQT</b> Vanguard All-Equity ETF Portfolio	\$662	39%
17	<b>ZAG</b> BMO Aggregate Bond Index ETF	\$627	10%
18	<b>VGRO</b> Vanguard Growth ETF Portfolio	\$617	19%
19	<b>ZWB</b> BMO Covered Call Canadian Banks ETF	\$606	24%
20	<b>ZCPB</b> BMO Core Plus Bond Fund ETF	\$574	44%

Source: National Bank of Canada, Bloomberg;

**Table 14 - Top ETF Outflows - YTD Oct 2022**

Ticker	Name	Flow (\$M)	Flow/AUM
1	<b>XIC</b> iShares Core S&P/TSX Capped Composite Index ETF	-\$896	-9%
2	<b>ESGYF</b> BMO MSCI USA ESG Leaders Index ETF	-\$768	-94%
3	<b>HXCN</b> Horizons S&P/TSX Capped Composite Index ETF	-\$639	-32%
4	<b>TTP</b> TD Canadian Equity Index ETF	-\$638	-37%
5	<b>HXS</b> Horizons S&P 500 Index ETF	-\$627	-16%
6	<b>ZEM</b> BMO MSCI Emerging Markets Index ETF	-\$616	-25%
7	<b>ZLU</b> BMO Low Volatility US Equity ETF	-\$486	-26%
8	<b>XSH</b> iShares Core Canadian Short Term Corporate Bond Ir	-\$445	-24%
9	<b>ZSP</b> BMO S&P 500 Index ETF	-\$417	-4%
10	<b>ZCM</b> BMO Mid Corporate Bond Index ETF	-\$399	-39%
11	<b>TEC</b> TD Global Technology Leaders Index ETF	-\$378	-18%
12	<b>CMUE</b> CIBC Multifactor US Equity ETF	-\$342	-93%
13	<b>CMCE</b> CIBC Multifactor Canadian Equity ETF	-\$337	-103%
14	<b>VALTU</b> CI Gold Bullion Fund	-\$322	-92%
15	<b>ZMP</b> BMO Mid Provincial Bond Index ETF	-\$320	-43%
16	<b>XSB</b> iShares Core Canadian Short Term Bond Index ETF	-\$310	-9%
17	<b>ZPR</b> BMO Laddered Preferred Share Index ETF	-\$305	-13%
18	<b>ZGB</b> BMO Government Bond Index ETF	-\$295	-33%
19	<b>CGXF</b> CI Gold+ Giants Covered Call ETF	-\$287	-61%
20	<b>HPR</b> Horizons Active Preferred Share ETF	-\$271	-15%

Source: National Bank of Canada, Bloomberg

**Table 15 - ETF Flows by Category - YTD Oct 2022**

Asset Class	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Equity	\$191,316	63%	\$10,219	5%
Fixed Income	\$88,175	29%	\$10,816	11%
Commodities	\$1,394	0%	-\$371	-19%
Multi-Asset	\$15,620	5%	\$1,873	12%
Inverse / Leveraged	\$2,736	1%	\$1,284	70%
Crypto-Asset	\$2,223	1%	-\$31	-1%
<b>Total</b>	<b>\$301,463</b>	<b>100%</b>	<b>\$23,791</b>	<b>6.9%</b>

\*Equity Flows include option strategies; Source: National Bank of Canada, Bloomberg

**Table 18 - Equity ETF Flows by Focus - YTD Oct 2022**

Focus	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Cap-weighted	\$111,600	58%	\$4,793	3%
Dividend / Income	\$20,878	11%	\$1,733	7%
Factor: Low Vol	\$7,357	4%	-\$900	-10%
Factor: Multi-factor	\$2,884	2%	-\$929	-22%
Factor: Fundamental	\$4,748	2%	\$382	7%
Sector	\$26,542	14%	\$1,372	5%
Thematic	\$11,203	6%	\$2,258	21%
ESG**	\$7,262	4%	\$1,854	29%
Other	\$6,106	3%	\$1,511	28%
<b>Total</b>	<b>\$191,316</b>	<b>100%</b>	<b>\$10,219</b>	<b>4.5%</b>

\*Equity Flows include option strategies; Source: National Bank of Canada, Bloomberg

\*\* Only includes ESG ETFs under Thematic category

**Table 16 - Equity ETF Flows by Geography - YTD Oct 2022**

Geography	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada	\$73,027	38%	\$3,187	4%
United States	\$66,990	35%	\$3,471	4%
DM: Broad	\$18,941	10%	\$817	3%
DM: Regional & Country	\$5,193	3%	\$752	11%
Emerging Markets	\$4,648	2%	-\$261	-4%
Global	\$22,519	12%	\$2,254	9%
<b>Total</b>	<b>\$191,316</b>	<b>100%</b>	<b>\$10,219</b>	<b>4.5%</b>

\*Equity Flows include option strategies; Source: National Bank of Canada, Bloomberg

**Table 17 - Equity ETF Flows by Sector\* - YTD Oct 2022**

Sector	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Financials	\$9,676	36%	\$595	5%
Energy	\$3,857	15%	\$400	18%
Real Estate	\$2,855	11%	-\$217	-5%
Health Care	\$2,686	10%	\$400	16%
Technology	\$2,601	10%	\$40	1%
Utilities	\$2,432	9%	\$458	20%
Materials	\$1,873	7%	-\$253	-10%
Other	\$561	2%	-\$51	-8%
<b>Total</b>	<b>\$26,542</b>	<b>100%</b>	<b>\$1,372</b>	<b>4%</b>

\*Includes all geo focuses and Covered Call Strategies; Source: NBF, Bloomberg

**Table 19 - Fixed Income ETF Flows by Type - YTD Oct 2022**

Type	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada Aggregate	\$26,973	31%	\$4,210	15%
Canada Government	\$8,970	10%	\$1,002	10%
Canada Corporate	\$13,384	15%	\$266	2%
U.S. / North America	\$6,883	8%	\$683	7%
Foreign	\$9,730	11%	\$212	2%
Sub-Investment Grade	\$3,645	4%	-\$404	-7%
Preferred/Convertible	\$6,453	7%	-\$1,082	-11%
Cash Alternative	\$12,137	14%	\$5,928	94%
<b>Total</b>	<b>\$88,175</b>	<b>100%</b>	<b>\$10,816</b>	<b>11.2%</b>

Source: National Bank of Canada, Bloomberg

**Table 20 - Fixed Income ETF Flows by Maturity - YTD Oct 2022**

Maturity	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Broad/Mixed	\$43,133	49%	\$2,825	5%
Ultra Short Term	\$5,578	6%	\$1,556	37%
Short Term	\$16,247	18%	-\$1,659	-8%
Mid Term	\$4,455	5%	\$175	3%
Long Term	\$4,635	5%	\$1,559	36%
Real Return	\$1,537	2%	\$52	3%
Target Maturity	\$453	1%	\$380	118%
Cash Alternative	\$12,137	14%	\$5,928	94%
<b>Total</b>	<b>\$88,175</b>	<b>100%</b>	<b>\$10,816</b>	<b>11.2%</b>

Source: National Bank of Canada, Bloomberg

**Table 21 - ETF Flows by Provider - YTD Oct 2022**

Provider	New Methodology (adjusted for ETF-of-ETFs)				Unadjusted	
	AUM (\$M)	Mkt Shr (%)	YTD Oct 2022		YTD Oct 2022	
			Flow (\$M)	Flow/AUM	AUM (\$M)	Flow (\$M)
1 RBC iShares	\$88,848	29.5%	\$3,205	3%	\$94,159	\$3,652
2 BMO	\$75,837	25.2%	\$3,900	4%	\$83,770	\$5,060
3 Vanguard	\$39,025	12.9%	\$4,580	9%	\$47,952	\$6,085
4 Horizons	\$20,820	6.9%	\$3,011	15%	\$21,361	\$3,113
5 CI First Asset	\$14,044	4.7%	\$369	2%	\$14,204	\$469
6 Mackenzie*	\$11,588	3.8%	\$1,006	8%	\$11,812	\$1,026
7 TDAM	\$7,732	2.6%	\$949	11%	\$7,810	\$959
8 NBI	\$6,225	2.1%	\$2,083	42%	\$6,225	\$2,083
9 Purpose	\$6,058	2.0%	\$1,891	30%	\$6,323	\$1,931
10 Invesco	\$4,475	1.5%	\$540	12%	\$4,495	\$539
11 Fidelity	\$2,810	0.9%	\$499	17%	\$3,032	\$599
12 CIBC	\$2,457	0.8%	-\$275	-9%	\$2,465	-\$275
13 Manulife	\$2,381	0.8%	\$195	8%	\$2,381	\$195
14 Harvest	\$2,343	0.8%	\$769	39%	\$2,685	\$1,105
15 Dynamic	\$2,183	0.7%	-\$222	-8%	\$2,183	-\$222
16 Evolve Funds	\$2,021	0.7%	\$756	41%	\$2,076	\$746
17 PIMCO	\$1,984	0.7%	\$97	5%	\$1,984	\$97
18 Desjardins	\$1,707	0.6%	-\$198	-10%	\$1,707	-\$198
19 Hamilton	\$1,378	0.5%	\$713	62%	\$1,763	\$877
20 Franklin Templeton	\$1,281	0.4%	-\$659	-30%	\$1,281	-\$659
21 AGF	\$1,122	0.4%	-\$146	-11%	\$1,122	-\$146
22 Scotia Bank	\$1,111	0.4%	\$384	43%	\$1,111	\$384
23 Ninepoint Partners	\$728	0.2%	\$279	87%	\$728	\$279
24 Picton Mahoney	\$609	0.2%	\$154	32%	\$609	\$154
25 Brompton Funds	\$425	0.1%	\$21	3%	\$487	\$33
26 First Trust	\$410	0.1%	\$34	8%	\$410	\$34
27 Middlefield	\$409	0.1%	-\$3	-1%	\$409	-\$3
28 3iQ	\$353	0.1%	-\$338	-21%	\$353	-\$338
29 Bristol Gate	\$297	0.1%	-\$10	-3%	\$297	-\$10
30 Guardian Capital	\$221	0.1%	\$114	78%	\$221	\$114
31 Emerge	\$126	0.0%	\$20	9%	\$126	\$20
32 IA Clarington	\$106	0.0%	-\$15	-11%	\$106	-\$15
33 Lysander	\$85	0.0%	\$5	4%	\$85	\$5
34 Accelerate	\$62	0.0%	\$8	12%	\$68	\$6
35 Mulvihill	\$48	0.0%	\$54	NA	\$48	\$54
36 Russell Investments	\$44	0.0%	-\$3	-5%	\$44	-\$3
37 Arrow Capital	\$37	0.0%	\$17	73%	\$37	\$17
38 Starlight	\$26	0.0%	-\$7	-16%	\$26	-\$7
39 SmartBe	\$24	0.0%	-\$6	-19%	\$24	-\$6
40 Evermore Capital	\$14	0.0%	\$15	NA	\$14	\$15
41 NCM Investments	\$5	0.0%	\$0	0%	\$5	\$0
42 Caldwell	\$5	0.0%	\$5	NA	\$5	\$5
<b>Total</b>	<b>\$301,463</b>	<b>100.0%</b>	<b>\$23,791</b>	<b>6.9%</b>	<b>\$326,002</b>	<b>\$27,775</b>

\*Includes Wealthsimple asset and flows. Source: NBF, Bloomberg

## Appendix 1 - Glossary

**AUM (Assets Under Management):** AUM is expressed in local currency, which is the Canadian dollar for the purpose of this report.

**Flow/AUM (Flow as % AUM):** Net flow as a percentage of assets under management from the beginning of the period.

**Flow:** The net dollar amount of fund creations and redemptions for the period based on daily NAV and daily changes in Shares Outstanding. Flows are expressed in local currency, which is the Canadian dollar for the purpose of this report.

**Market Share (%):** category's AUM as % of the total AUM.

**MER (Management Expense Ratio):** Manager's 2021 annual fee for managing and administering the fund, expressed as a percentage of total fund value. In most cases this includes fees from investing in other ETFs. Where audited MER is unavailable or if the fee has been significantly reduced recently, the MER is estimated using the Stated Management Fee and sales tax.

Canadian MER does not include trading commissions incurred by the ETF, nor does it include trading expenses (such as swap or forward fees). An asterisk (\*) indicates that the fund pays additional expenses such as swap or forward fees, which are normally reported under trading expenses. The asterisk can also indicate that the fund charges a performance fee. Data are sourced from annual fillings.

**NAV (Net Asset Value per share):** ETF price is used when NAV is not available.

*All numbers are as of last month's final business day.*

## Appendix 2 - Equity ETF Categories

We group Equity ETFs into the categories below. These groupings follow NBF's discretion and can differ from the ETF Provider's definition and classification from other sources.

**Cap-Weighted:** A fund that weights securities based on the total or float-adjusted market capitalization of each security.

**Dividend/Income:** A fund with primary goal of providing income. We classify a fund as belonging to the Income category when its strategy focuses on providing income, or the fund self-identifies as using an income strategy even though it may incorporate other factors in addition to income.

**Fundamental:** A fund that selects and/or weights securities based on fundamental metrics from a company's financial statements such as balance sheet. Strategies include Value, Growth, Quality, RAFI Fundamental, Earnings, etc.

**Low Vol or Risk:** A fund that aims to achieve reduced portfolio volatility, either by screening for low volatility stocks, low beta stocks and/or minimizing the portfolio volatility.

**Multi-Factor:** ETFs that consider more than one NBF-defined factor including Income, Fundamental and Risk.

**Sector:** ETFs that provide exposure to broad industry sectors classified by the Global Industry Classification Standard (GICS) or other similar classifications. This category contains all sector funds, including ones that screen and/or weight the portfolio using factors.

**Thematic:** ETFs that provide niche exposures such as blockchain technology, infrastructure, Marijuana companies, Socially Responsible Investing, technology sub-sectors, agriculture, water, sentiment & behaviour, etc. This category contains all thematic funds, including ones that screen and/or weight the portfolio using factors.

**Other:** Any non-cap-weighted strategy that is not covered by otherwise defined categories. This includes momentum, equal-weight, share buyback, high beta, proprietary, actively managed, tactical rotation, price-weighted, etc.



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