

## July 2022: Outflows from equities, with rotation towards safety in bonds

- Canadian ETFs gained \$1.67 billion overall despite outflows from Equity ETFs
- Fixed Income ETF inflows were strong at \$1.74 billion, and with clear preferences for safety over risk
- Commodity, multi-asset and crypto-asset ETFs all enjoyed inflows in July
- July was a light month for ETF launches; Purpose introduced one new ESG product

**Summary:** Despite \$1 billion withdrawn from Canadian equities and some outflows from U.S. equities, Canadian ETF inflows still netted a positive \$1.67 billion in July. Equity outflows in Canada were dominated by XIU, and together with other broad market cap-weighted index ETFs, the category suffered the largest chunk of outflows at nearly \$800 million, while sector ETFs followed with redemptions of \$180 million. In particular, energy sector ETFs suffered their first outflow of 2022 in July (Chart 2). Dividend and low volatility ETFs were the only two equity categories with inflows (Table 10).

Fixed Income welcomed \$1.74 billion in new assets, with Canadian government bond and “cash alternative” (or “high interest savings”) ETFs leading the inflows. Similar to last month, investors pulled money out of Sub-Investment Grade bond and Preferred Share ETFs, even though credit spreads improved from the trough in June.

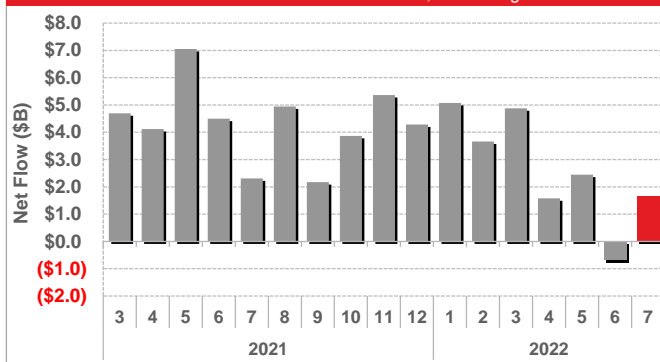
Commodities ETFs were flat on the month; both inflows and outflows were muted. Crypto-Asset ETFs had small inflows this month, a major diminution in activity since their choppy flows and volatility in the last two months.

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

**Equity** ETFs bled \$717 million in assets in July, a significant outflow but slower than the pace of redemptions in June. ETFs focusing on Canada and the U.S. lost assets while Global equity ETFs enjoyed inflows, including developed markets ZEA, emerging markets ZEM and other ETFs with broad global exposure. Market cap-weighted ETF outflows were concentrated in a few tickers (XIU, XSP, TTP). Sector ETFs saw outflows of \$181 million, led by the energy sector (XEG); ETF investors may have been reacting to reduced demand scenarios and recession fears, reflected in faltering crude oil prices.

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

Source: National Bank Financial, Bloomberg



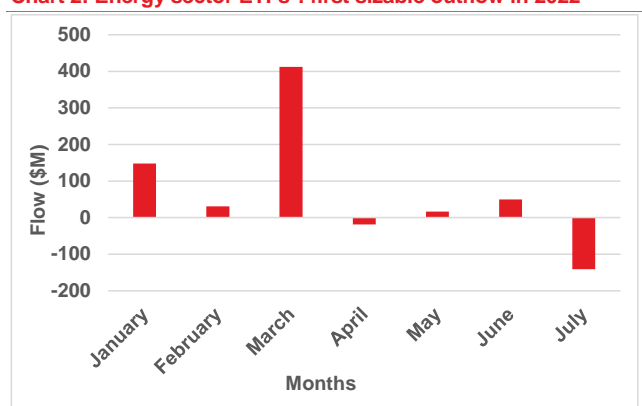
**Table 1 - ETF Flows by Category - YTD July 2022**

	AUM (\$M)	Mkt Shr (%)	July 2022		YTD July 2022	
			Flow \$M	Flow/AUM	Flow \$M	Flow/AUM
Equity	\$194,615		-\$717	-0.4%	\$9,037	4.0%
Canada	\$74,723	25%	-\$1,009	-1.4%	\$3,215	4.0%
United States	\$66,955	22%	-\$190	-0.3%	\$2,436	3.0%
International	\$52,937	17%	\$481	1.0%	\$3,386	5.2%
Fixed Income	\$87,603	29%	\$1,744	2.1%	\$6,502	6.8%
Commodities	\$1,561	1%	\$2	0.1%	-\$263	-13.7%
Multi-Asset	\$15,855	5%	\$306	2.0%	\$1,676	10.7%
Inverse / Levered	\$2,367	1%	\$136	6.0%	\$874	49.7%
Crypto-Asset	\$2,720	1%	\$198	10.9%	\$256	4.3%
<b>Total</b>	<b>\$304,721</b>	<b>100%</b>	<b>\$1,669</b>	<b>0.6%</b>	<b>\$18,083</b>	<b>5.2%</b>

\*Equity Flows include option strategies;

Source: National Bank of Canada, Bloomberg

**Chart 2: Energy sector ETFs\*: first sizable outflow in 2022**



\*Excluding covered call ETFs; Source: NBF ETF Research, Bloomberg

Fixed Income ETFs pulled in net flows of \$1.74 billion, but even within this asset class, we could observe flows rotating from relative risk to safety. Canada government bond (long bond TCLB, short-term ZFS) and Cash Alternative (CSAV, PSA, HISA, HUSV/U) categories each gathered north of \$800 million. On the riskier side, sub-investment grade (ZHY) and preferred share (CPD) ETFs continued to see outflows—perhaps a sign that investors are still seeking safety in these volatile and uncertain markets.

Multi-asset ETFs welcomed inflows overall. Asset allocation ETFs and “alternative strategies” were the most popular sub-categories.

Crypto-Asset ETFs made a comeback with \$198 million in creations after a slump in June.

ETHH/U and BTCC/U both showed up on the inflow leaderboard (Table 5).

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

BMO had the highest inflows in July with strong creations in their fixed income suite in addition to emerging market equities. Excluding typical institutional outflows from XIU, RBC iShares would have had inflows with similarly broad creations across fixed income ETFs, multi-asset portfolios and emerging market equities (XEF). Mackenzie’s outflows were quite concentrated in its Emerging Market bond ETF QEBH. Outside the top 10 issuers, Evolve had the largest inflow, primarily towards its cash alternative ETF HISA.

July was relatively quiet in terms of ETF launches; one product came to market (BDIC), a new ESG ETF from Purpose.

**Canadian ESG ETF Flows (Table 4):** The demand for ESG shows no signs of slowing down; Canada-listed ESG ETFs continued to attract new assets in July with \$259 million in flows. The fixed income category, a relative newcomer to the world of ESG ETF investments, contributed the most. The actively managed Invesco ESG Global Bond ETF (IWBE) received a meaningful institutional subscription of \$114 million in July, which brought its AUM to a critical mass of

**Table 2 - ETF Flows by Provider - YTD July 2022**

Provider	AUM (\$M)	Mkt Shr (%)	July 2022		YTD July 2022	
			Flow (\$M)	Flow/AUM	Flow (\$M)	Flow/AUM
1 RBC iShares	\$90,655	29.8%	-\$613	-1%	\$2,335	2%
2 BMO	\$78,310	25.7%	\$657	1%	\$3,653	4%
3 Vanguard	\$39,144	12.8%	\$408	1%	\$3,694	8%
4 Horizons	\$21,140	6.9%	\$170	1%	\$2,990	15%
5 CI First Asset	\$13,625	4.5%	\$192	2%	-\$469	-3%
6 Mackenzie*	\$11,728	3.8%	-\$116	-1%	\$793	6%
7 TDAM	\$7,961	2.6%	\$158	2%	\$828	10%
8 National Bank Investments	\$6,076	2.0%	\$145	3%	\$1,665	34%
9 Purpose	\$5,376	1.8%	\$352	7%	\$1,126	18%
10 Invesco	\$4,384	1.4%	\$90	2%	\$230	5%
11 Fidelity	\$2,768	0.9%	\$10	0%	\$413	14%
12 CIBC	\$2,637	0.9%	\$2	0%	-\$199	-6%
13 Manulife	\$2,407	0.8%	\$20	1%	\$152	6%
14 Harvest	\$2,379	0.8%	\$92	4%	\$714	36%
15 Dynamic	\$2,131	0.7%	-\$34	-2%	-\$263	-9%
16 PIMCO	\$1,954	0.6%	\$4	0%	-\$7	0%
17 Desjardins	\$1,784	0.6%	-\$23	-1%	-\$154	-7%
18 Evolve Funds	\$1,574	0.5%	\$177	13%	\$229	13%
19 Franklin Templeton	\$1,320	0.4%	-\$100	-7%	-\$652	-30%
20 Hamilton	\$1,204	0.4%	\$57	5%	\$486	42%
21 AGF	\$1,134	0.4%	-\$9	-1%	-\$168	-12%
22 Scotia Bank	\$1,071	0.4%	\$19	2%	\$325	37%
23 Ninepoint Partners	\$691	0.2%	\$15	2%	\$304	95%
24 Picton Mahoney	\$560	0.2%	\$12	2%	\$97	20%
25 3iQ	\$491	0.2%	-\$24	-6%	-\$235	-15%
26 Brompton Funds	\$453	0.1%	\$2	0%	\$18	3%
27 First Trust	\$396	0.1%	\$11	3%	\$17	4%
28 Bristol Gate	\$308	0.1%	\$0	0%	-\$4	-1%
29 Middlefield	\$234	0.1%	-\$2	-1%	-\$18	-33%
30 Guardian Capital	\$227	0.1%	\$2	1%	\$109	74%
31 Emerge	\$128	0.0%	\$0	0%	\$11	5%
32 IA Clarington	\$122	0.0%	-\$5	-4%	-\$8	-6%
33 Lysander	\$88	0.0%	\$1	1%	-\$1	-1%
34 Accelerate	\$66	0.0%	\$0	-1%	\$11	17%
35 Russell Investments	\$47	0.0%	\$0	0%	-\$2	-4%
36 Mulvihill	\$37	0.0%	\$0	1%	\$40	NA
37 Starlight	\$35	0.0%	\$0	0%	-\$2	-4%
38 Arrow Capital	\$33	0.0%	\$0	0%	\$12	49%
39 SmartBe	\$23	0.0%	\$0	0%	-\$4	-15%
40 Evermore Capital	\$10	0.0%	\$0	0%	\$11	NA
41 NCM Investments	\$6	0.0%	\$0	0%	\$0	0%
42 Caldwell	\$5	0.0%	\$0	0%	\$5	NA
<b>Total</b>	<b>\$304,721</b>	<b>100.0%</b>	<b>\$1,669</b>	<b>0.6%</b>	<b>\$18,083</b>	<b>5.2%</b>

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

**Table 3: New Launches - July 2022**

Name	Ticker	Mgmt Fee (%)	Focus
1 Black Diamond Impact Core Equity Fund	BDIC	0.95	ESG

Source: NBF, SEDAR, ETF Providers

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

Category	AUM (\$M)	AUM (%)	July 2022		Jan - July 2022	
			Flow (\$M)	Flow/AUM	Flow (\$M)	Flow/AUM
Equity	\$8,699	83%	\$73	0.9%	\$1,613	19.7%
Broad - Canada	\$2,124	20%	\$18	0.9%	\$764	49.9%
Broad - U.S.	\$2,305	22%	\$39	1.8%	\$427	18.8%
Broad - DM	\$1,215	12%	\$33	2.9%	\$159	12.0%
Broad - EM	\$297	3%	-\$3	-1.1%	-\$10	-2.8%
Broad - Global	\$1,223	12%	\$9	0.8%	\$197	16.9%
Environment	\$963	9%	-\$7	-0.8%	-\$69	-5.9%
Clean Energy	\$348	3%	-\$6	-1.9%	\$171	100.2%
Social	\$153	1%	-\$4	-3.0%	-\$12	-6.3%
Infrastructure	\$71	1%	-\$4	-6.0%	-\$13	-127.0%
Commodities	\$11	0%	\$0	0.0%	\$12	NA
Multi-Asset	\$149	1%	\$1	0.4%	\$27	18.6%
Fixed Income	\$1,633	16%	\$185	13.2%	\$703	64.8%
<b>Total Displayed</b>	<b>\$10,492</b>	<b>100%</b>	<b>\$259</b>	<b>2.7%</b>	<b>\$2,355</b>	<b>25.0%</b>

Source: NBF ETF Research, Bloomberg. Data as of July 29, 2022

\$158 million. Fixed income ESG ETFs have been a major growth engine for Canadian ESG ETFs this year; investors have poured in assets amounting to \$703 million in 2022 so far, fully 65% of the category's asset base at the end of 2021. The growth rate is well above the still-impressive 20% inflow generated by equity ESG ETFs this year. When it comes to fixed income ESG investing in Canada, investors can now confront a large menu of options; the category now consists of 24 ETFs with varying maturities and investment strategies. The variety of regional exposures spans across Canada, the U.S. and globally-focused products.

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

Ticker	Name	Flow (\$M)	Flow/AUM
1	<b>TCLB</b> TD Canadian Long Term Federal Bond ETF	\$404	46%
2	<b>ZFS</b> BMO Short Federal Bond Index ETF	\$385	124%
3	<b>CSAV</b> CI High Interest Savings ETF	\$306	12%
4	<b>PSA</b> Purpose High Interest Savings ETF	\$200	11%
5	<b>HISA</b> High Interest Savings Account Fund	\$195	78%
6	<b>ZMU</b> BMO Mid-Term US IG Corporate Bond CAD Hedged	\$189	9%
7	<b>XCB</b> iShares Core Canadian Corporat	\$163	15%
8	<b>ZEM</b> BMO MSCI Emerging Markets Index ETF	\$131	13%
9	<b>ZMMK</b> BMO Money Market Fund ETF Series	\$129	130%
10	<b>VGRO</b> Vanguard Growth ETF Portfolio	\$119	4%
11	<b>IWBE</b> Invesco ESG Global Bond ETF	\$116	288%
12	<b>ZCN</b> BMO S&P/TSX Capped Composite Index ETF	\$102	2%
13	<b>XGRO</b> iShares Core Growth ETF Portfolio	\$96	8%
14	<b>ETHH/U</b> Purpose Ether ETF	\$91	98%
15	<b>ZCS</b> BMO Short Corporate Bond Index ETF	\$90	7%
16	<b>HSUV/U</b> Horizons USD Cash Maximizer ETF	\$78	14%
17	<b>BTCC/U</b> Purpose Bitcoin ETF	\$77	49%
18	<b>ZEa</b> BMO MSCI EAFE Index ETF	\$74	2%
19	<b>ZWB</b> BMO Covered Call Canadian Banks ETF	\$73	3%
20	<b>XSP</b> iShares Core S&P 500 Index ETF CAD- Hedged	\$64	1%

Source: National Bank of Canada, Bloomberg;

Ticker	Name	Flow (\$M)	Flow/AUM
1	<b>XIU</b> iShares S&P/TSX 60 Index ETF	-\$808	-7%
2	<b>ZSP</b> BMO S&P 500 Index ETF	-\$427	-6%
3	<b>TTP</b> TD Canadian Equity Index ETF	-\$295	-23%
4	<b>ZHY</b> BMO High Yield US Corporate Bond CAD Hedged	-\$161	-19%
5	<b>XEG</b> iShares S&P/TSX Capped Energy Index ETF	-\$155	-7%
6	<b>QEBH</b> Mackenzie Emerging Markets Bond Index Etf Cad-Hedged	-\$128	-32%
7	<b>CPD</b> iShares S&P/TSX Canadian Preferred Share Index ETF	-\$97	-9%
8	<b>HXS</b> Horizons S&P 500 Index ETF	-\$78	-3%
9	<b>XTR</b> iShares Diversified Monthly Income ETF	-\$68	-12%
10	<b>PGL</b> Invesco Long Term Government Bond Index ETF	-\$67	-24%
11	<b>ZAG</b> BMO Aggregate Bond Index ETF	-\$61	-1%
12	<b>FLAM</b> Franklin FTSE US Index ETF	-\$53	-17%
13	<b>MFT</b> Mackenzie Floating Rate Income ETF	-\$53	-5%
14	<b>ZIC</b> BMO Mid-Term US IG Corporate Bond Index ETF	-\$52	-54%
15	<b>XBB</b> iShares Core Canadian Universe Bond Index ETF	-\$44	-1%
16	<b>WXM</b> CI Morningstar Canada Momentum Index ETF	-\$43	-5%
17	<b>FSF</b> CI Global Financial Sector ETF	-\$42	-5%
18	<b>ZEB</b> BMO Equal Weight Banks Index ETF	-\$42	-2%
19	<b>XFN</b> iShares S&P/TSX Capped Financials Index ETF	-\$36	-3%
20	<b>DXG</b> Dynamic Active Global Dividend ETF	-\$34	-4%

Source: National Bank of Canada, Bloomberg;

Tables continue on the next page

**Table 7 - ETF Flows by Category - July 2022**

Asset Class	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Equity	\$194,615	64%	-\$717	-0.4%
Fixed Income	\$87,603	29%	\$1,744	2.1%
Commodities	\$1,561	1%	\$2	0.1%
Multi-Asset	\$15,855	5%	\$306	2.0%
Inverse / Levered	\$2,367	1%	\$136	6.0%
Crypto-Asset	\$2,720	1%	\$198	10.9%
<b>Total</b>	<b>\$304,721</b>	<b>100%</b>	<b>\$1,669</b>	<b>0.6%</b>

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

**Table 8 - Equity ETF Flows by Geography - July 2022**

Geography	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada	\$74,723	38%	-\$1,009	-1.4%
United States	\$66,955	34%	-\$190	-0.3%
DM: Broad	\$19,919	10%	\$243	1.3%
DM: Regional & Country	\$5,546	3%	\$11	0.2%
Emerging Markets	\$4,988	3%	\$132	2.7%
Global	\$22,484	12%	\$95	0.4%
<b>Total</b>	<b>\$194,615</b>	<b>100%</b>	<b>-\$717</b>	<b>-0.4%</b>

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

**Table 9 - Equity ETF Flows by Sector\* - July 2022**

Sector	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Financials	\$9,897	37%	-\$60	-0.6%
Energy	\$3,653	14%	-\$158	-4.3%
Real Estate	\$3,141	12%	-\$22	-0.7%
Technology	\$2,767	10%	\$21	0.8%
Utilities	\$2,616	10%	\$14	0.5%
Health Care	\$2,544	9%	\$27	1.1%
Materials	\$1,825	7%	\$3	0.1%
Other	\$568	2%	-\$5	-1.1%
<b>Total</b>	<b>\$27,011</b>	<b>100%</b>	<b>-\$181</b>	<b>-0.7%</b>

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

**Table 10 - Equity ETF Flows by Focus - July 2022**

Focus	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Cap-weighted	\$114,077	59%	-\$796	-0.7%
Dividend / Income	\$20,935	11%	\$141	0.7%
Factor: Low Vol	\$7,384	4%	\$19	0.3%
Factor: Multi-factor	\$2,956	2%	-\$82	-1.1%
Factor: Fundamental	\$5,002	3%	-\$20	-0.4%
Sector	\$27,011	14%	-\$181	-0.7%
Thematic	\$11,359	6%	\$87	0.8%
ESG**	\$7,315	4%	\$81	1.2%
Other	\$5,892	3%	\$65	1.2%
<b>Total</b>	<b>\$194,615</b>	<b>100%</b>	<b>-\$717</b>	<b>-0.4%</b>

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

\*\* Only includes ESG ETFs under Thematic category

**Table 11 - Fixed Income ETF Flows by Type - July 2022**

Type	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada Aggregate	\$27,386	31%	\$279	1.1%
Canada Government	\$9,165	10%	\$811	10.1%
Canada Corporate	\$13,114	15%	\$240	1.9%
U.S. / North America	\$7,615	9%	\$151	2.1%
Foreign	\$10,292	12%	-\$79	-0.8%
Sub-Investment Grade	\$3,947	5%	-\$320	-7.8%
Preferred/Convertible	\$7,362	8%	-\$197	-2.6%
Cash Alternative	\$8,722	10%	\$860	10.9%
<b>Total</b>	<b>\$87,603</b>	<b>100%</b>	<b>\$1,744</b>	<b>2.1%</b>

Source: National Bank of Canada, Bloomberg

**Table 12 - Fixed Income ETF Flows by Maturity - July 2022**

Maturity	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Broad/Mixed	\$45,426	52%	-\$295	-0.7%
Ultra Short Term	\$5,000	6%	\$101	2.1%
Short Term	\$17,447	20%	\$384	2.3%
Mid Term	\$4,491	5%	\$146	3.5%
Long Term	\$4,600	5%	\$468	12.1%
Real Return	\$1,659	2%	\$13	0.8%
Target Maturity	\$257	0%	\$67	35.6%
Cash Alternative	\$8,722	10%	\$860	10.9%
<b>Total</b>	<b>\$87,603</b>	<b>100%</b>	<b>\$1,744</b>	<b>2.1%</b>

Source: National Bank of Canada, Bloomberg

**YTD July 2022 Flow (Tables 13 - 20):**

Despite challenges emerging from all corners of the market in 2022, Canadian ETFs managed to rake in a net \$18 billion year-to-date. Equity inflows amount to \$9 billion and fixed income ranks second with \$6.5 billion in creations. Commodities ETFs had small outflows of \$263 million, primarily from gold ETFs. Multi-Asset ETFs welcomed \$1.7 billion in flows. Crypto asset ETFs had small inflows of \$256 million, with wild gyrations typical of this nascent category.

Within Equity, Canada's leadership position in flows has waned as interest in the U.S. and International Equity has picked up. This shifting position could be a sign that inflation and valuation concerns have alleviated in recent months now that the market has passed through a period of selloffs with surging (then falling) commodity prices. In 2022, so far, Canadian and International regions each saw inflows of over \$3 billion, while the U.S. has trailed behind with \$2.4 billion inflows—but there are still five months left to the year, so the outcome of the race is still up in the air. In terms of factor ETF breakdowns, low volatility and multi-factor ETFs suffered outflows of more than \$900 million each, while the other categories had inflows.

At \$6.5 billion, the inflow into Fixed Income ETFs has been quite impressive given the fact that 2022 has been the worst ever for the major aggregate bond universe benchmark products. Despite the painful drawdowns, the Canada aggregate bond category dominates (53% of total fixed income ETF inflows); cash alternative and U.S./North America bonds rank a distant second and third place. Preferred share ETFs registered an outflow with \$808 million redeemed year-to-date, the largest outflow among all fixed income categories.

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

Ticker	Name	Flow (\$M)	Flow/AUM
1	TCLB TD Canadian Long Term Federal Bond ETF	\$1,121	382%
2	ESGY BMO MSCI USA ESG Leaders Index ETF	\$1,089	119%
3	VFV Vanguard S&P 500 Index ETF	\$1,088	17%
4	HBB Horizons Cdn Select Universe Bond ETF	\$1,036	66%
5	HXT Horizon S&P/TSX 60 Index ETF	\$1,033	36%
6	CSAV CI High Interest Savings ETF	\$821	39%
7	ZEA BMO MSCI EAFE Index ETF	\$769	14%
8	NSCE NBI Sustainable Canadian Equity ETF	\$715	201%
9	ZMU BMO Mid-Term US IG Corporate Bond CAD Hedged	\$680	36%
10	ZEB BMO Equal Weight Banks Bond ETF	\$586	22%
11	VGRO Vanguard Growth ETF Portfolio	\$582	18%
12	VEQT Vanguard All-Equity ETF Portfolio	\$571	33%
13	ZCPB BMO Core Plus Bond Fund ETF	\$536	41%
14	NSAV Horizons Cash Maximizer ETF	\$530	35%
15	XSP iShares Core S&P 500 Index ETF CAD-Hedged	\$530	6%
16	ZWB BMO Covered Call Canadian Banks ETF	\$477	19%
17	XEQT iShares Core Equity ETF Portfolio	\$448	51%
18	XIU iShares S&P/TSX 60 Index ETF	\$393	4%
19	ZFO CI Enhanced Government Bond ETF	\$378	75%
20	PSA Purpose High Interest Savings ETF	\$377	21%

Source: National Bank of Canada, Bloomberg;

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

Ticker	Name	Flow (\$M)	Flow/AUM
1	ESGY/F BMO MSCI USA ESG Leaders Index ETF	-\$768	-94%
2	XIC iShares Core S&P/TSX Capped Composite Index ETF	-\$589	-6%
3	TTP TD Canadian Equity Index ETF	-\$567	-33%
4	ZEM BMO MSCI Emerging Markets Index ETF	-\$548	-27%
5	ZLU BMO Low Volatility US Equity ETF	-\$501	-27%
6	TEC TD Global Technology Leaders Index ETF	-\$416	-20%
7	ZCM BMO Mid Corporate Bond Index ETF	-\$374	-36%
8	HXS Horizons S&P 500 Index ETF	-\$345	-10%
9	CMUE CIBC Multifactor US Equity ETF	-\$339	-92%
10	XSH iShares Core Canadian Short Term Corporate Bond	-\$338	-18%
11	ZMP BMO Mid Provincial Bond Index ETF	-\$337	-45%
12	CMCE CIBC Multifactor Canadian Equity ETF	-\$333	-101%
13	ZFL BMO Long Federal Bond Index ETF	-\$331	-13%
14	VALTU CI Gold Bullion Fund	-\$317	-90%
15	CGXF CI Gold+ Giants Covered Call ETF	-\$273	-58%
16	HPR Horizons Active Preferred Share ETF	-\$271	-14%
17	FLGA Franklin Global Aggregate Bond Active ETF	-\$260	-38%
18	XFN iShares S&P/TSX Capped Financials Index ETF	-\$256	-14%
19	ZPR BMO Laddered Preferred Share Index ETF	-\$254	-10%
20	DXG Dynamic Active Global Dividend ETF	-\$245	-19%

Source: National Bank of Canada, Bloomberg;

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

Asset Class	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Equity	\$194,615	64%	\$9,037	4%
Fixed Income	\$87,603	29%	\$6,502	7%
Commodities	\$1,561	1%	-\$263	-14%
Multi-Asset	\$15,855	5%	\$1,676	11%
Inverse / Leveraged	\$2,367	1%	\$874	50%
Crypto-Asset	\$2,720	1%	\$256	4%
<b>Total</b>	<b>\$304,721</b>	<b>100%</b>	<b>\$18,083</b>	<b>5.2%</b>

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

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

Geography	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada	\$74,723	38%	\$3,215	4%
United States	\$66,955	34%	\$2,436	3%
DM: Broad	\$19,919	10%	\$1,044	4%
DM: Regional & Country	\$5,546	3%	\$852	12%
Emerging Markets	\$4,988	3%	-\$348	-5%
Global	\$22,484	12%	\$1,839	8%
<b>Total</b>	<b>\$194,615</b>	<b>100%</b>	<b>\$9,037</b>	<b>4.0%</b>

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

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

Sector	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Financials	\$9,897	37%	\$684	6%
Energy	\$3,658	14%	\$554	25%
Real Estate	\$3,141	12%	-\$229	-6%
Technology	\$2,767	10%	-\$76	-2%
Utilities	\$2,616	10%	\$269	12%
Health Care	\$2,544	9%	\$322	13%
Materials	\$1,825	7%	-\$283	-11%
Other	\$563	2%	-\$76	-11%
<b>Total</b>	<b>\$27,011</b>	<b>100%</b>	<b>\$1,164</b>	<b>4%</b>

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

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

Focus	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Cap-weighted	\$114,077	59%	\$4,550	3%
Dividend / Income	\$20,935	11%	\$1,434	6%
Factor: Low Vol	\$7,384	4%	-\$946	-10%
Factor: Multi-factor	\$2,956	2%	-\$917	-21%
Factor: Fundamental	\$5,002	3%	\$509	10%
Sector	\$27,011	14%	\$1,164	4%
Thematic	\$11,359	6%	\$2,068	19%
ESG**	\$7,315	4%	\$1,702	26%
Other	\$5,892	3%	\$1,175	22%
<b>Total</b>	<b>\$194,615</b>	<b>100%</b>	<b>\$9,037</b>	<b>4.0%</b>

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

\*\* Only includes ESG ETFs under Thematic category

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

Type	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada Aggregate	\$27,386	31%	\$3,441	12%
Canada Government	\$9,165	10%	\$609	6%
Canada Corporate	\$13,114	15%	-\$442	-3%
U.S. / North America	\$7,615	9%	\$1,175	12%
Foreign	\$10,292	12%	\$166	1%
Sub-Investment Grade	\$3,947	5%	-\$186	-3%
Preferred/Convertible	\$7,362	8%	-\$808	-8%
Cash Alternative	\$8,722	10%	\$2,550	41%
<b>Total</b>	<b>\$87,603</b>	<b>100%</b>	<b>\$6,502</b>	<b>6.8%</b>

Source: National Bank of Canada, Bloomberg

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

Maturity	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Broad/Mixed	\$45,426	52%	\$2,606	5%
Ultra Short Term	\$5,000	6%	\$920	22%
Short Term	\$17,447	20%	-\$914	-5%
Mid Term	\$4,491	5%	\$47	1%
Long Term	\$4,600	5%	\$1,062	24%
Real Return	\$1,659	2%	\$53	3%
Target Maturity	\$257	0%	\$178	55%
Cash Alternative	\$8,722	10%	\$2,550	41%
<b>Total</b>	<b>\$87,603</b>	<b>100%</b>	<b>\$6,502</b>	<b>6.8%</b>

Source: National Bank of Canada, 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 filings.

**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.

### July 2022: Outflows from equities with rotations towards safety in bonds

August 3, 2022

**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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