

August 2021: No Late Summer Lull

- Canadian ETFs gathered nearly \$5 billion in August, bringing YTD 2021 total inflow to \$37 billion
- Inflows into Low volatility ETFs continued; Financials and Utilities received the largest flow among sectors
- Fixed Income ETFs attracted new assets into all categories except cash alternative ETFs
- Nineteen ETFs were launched in August with a wide array of strategies

Summary: Canadian ETFs gathered a sizable \$4.9 billion in August, bringing year-to-date flows to \$37 billion. August's inflows went primarily into Equity products, with \$3.5 billion (70% of total flows) created. Fixed Income ETFs registered inflows of \$905 million, and in a sign of returning bullish sentiment, "cash alternative" was the only fixed income category with outflows. Commodity ETFs suffered small outflows amounting to \$14 million as crude oil prices took a dive and precious metal prices continued to consolidate. Crypto-Asset ETFs received \$202 million amid a resurgence in bitcoin price and investor traction in this speculative and highly volatile asset class.

Flows by Asset Class, Category and Product: (Table 1 & Tables 4 - 11)

Equity ETF inflow in August was one of the highest months year-to-date. Market cap-weighted passive ETFs single-handedly gathered \$2.9 billion. Canada (XIU, XIC, HXCN, CCDN, ZCN) and the U.S. (XUS, ZSP, VEV) dominated the leaderboard from a regional perspective, but Emerging Markets (HXEM) extended its consecutive outflow streak to five months in a row (Chart 2). Cyclical sectors (Financials, Technology), as well as defensive sectors (Utilities) both welcomed inflows, reflecting mixed market views from investors. Energy sector ETFs (ZEO, XEG) witnessed redemptions; the price of crude oil price went through a steep retracement in August amid fears of rising COVID-19 case counts globally. Sector ETFs as a category attracted \$296 million, a distant second place after market cap-weighted ETFs. Low volatility factor ETFs managed to maintain a positive monthly inflow –altogether, low vol ETFs attracted \$120 million. Several providers including CI First Asset, Franklin Templeton, RBC iShares and Manulife saw small outflows from their multi-factor ETFs, so the category as a whole witnessed net outflows of \$48 million.

Fixed Income ETFs welcomed \$905 million, spread evenly among all categories except for cash alternative (HSAV) ETFs, which saw outflows of \$72 million dollars. This category has been a perennial favourite during most market conditions, but now that it has grown to \$5.7 billion in AUM over five ETFs, it seems that some investors redeem when they wish to put money to work in higher risk/reward assets.

Chart 1: Canadian ETF Flows by Month

Source: National Bank Financial, Bloomberg

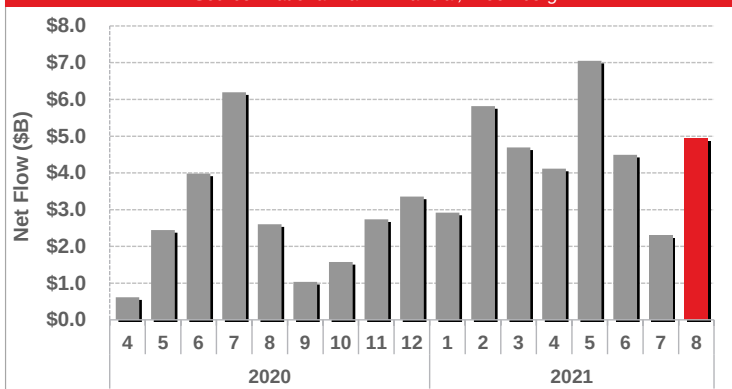
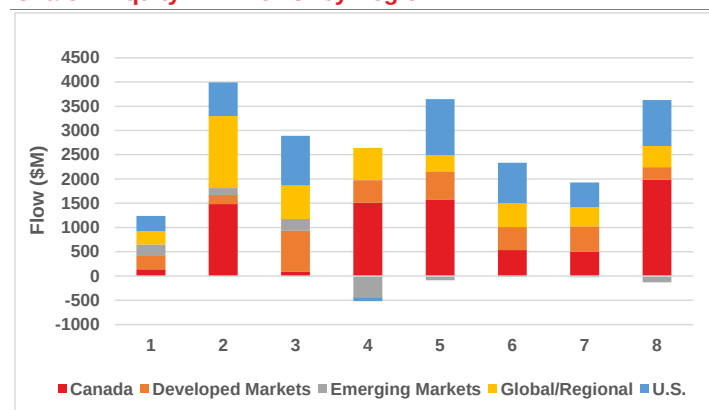


Table 1 - ETF Flows by Category - YTD August 2021

	AUM (\$M)	Mkt Shr (%)	August 2021		YTD August 2021	
			Flow \$M	Flow/AUM	Flow \$M	Flow/AUM
Equity	\$194,792		\$3,492	1.9%	\$21,511	13.6%
Canada	\$70,994	23%	\$1,985	2.9%	\$7,815	14.4%
United States	\$67,132	22%	\$947	1.5%	\$5,397	9.6%
International	\$56,666	19%	\$560	1.0%	\$8,299	17.4%
Fixed Income	\$85,413	28%	\$905	1.1%	\$6,265	7.2%
Commodities	\$2,090	1%	-\$14	-0.7%	\$312	16.6%
Multi-Asset	\$14,137	5%	\$345	2.5%	\$4,124	45.3%
Inverse / Levered	\$1,423	0%	\$12	0.8%	\$201	17.0%
Crypto-Asset	\$4,598	2%	\$202	5.9%	\$4,573	NA
Total	\$302,452	100%	\$4,942	1.7%	\$36,986	14.4%

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

Chart 2: Equity ETF Flows* by Region



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

Outside of cash, the demand for fixed income was across the board and Canada aggregate and corporate bonds were the two most popular categories, with Canada government and North American bond ETFs not far behind on the inflows table.

In the **Multi-Asset** category, growth oriented (VGRO) and all-equity (VEQT) ETFs were more popular than those with higher bond allocations, perhaps signaling that the risk preference of investors remains tilted towards growth.

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

In August, RBC iShares, BMO and Vanguard registered the largest net inflows, while Scotia Bank enjoyed one of the highest percentage flows (based on starting assets) because of creations in its relatively new suite of passive index ETFs. Ninepoint Partners also saw double-digit percentage inflows primarily into its energy fund. Year-to-date, the top three providers RBC iShares, BMO and Vanguard took up 50% of the total inflows but nearly 70% of the market share, suggesting that the ETF ecosystem is continuing to mature and diversify beyond the largest incumbents as the pie grows. Hamilton also posted notable percentage inflows; consistent with the year-long demand for financials, their actively managed financial sector ETFs have seen inflows throughout the year.

Nineteen ETFs were launched in August listed in Table 3. A wide array of strategies were introduced from broad market ETFs to ESG, Innovation, TIPs and Bitcoin.

As of this writing (September 2, 2021), Horizons launched *BetaPro Equal Weight Canadian REIT 2x Daily Bull ETF ("HREU")* and the *BetaPro Equal Weight Canadian REIT -2x Daily Bear ETF ("HRED")*.

Table 2 - ETF Flows by Provider - YTD August 2021

Provider	AUM (\$M)	Mkt Shr (%)	August 2021		YTD August 2021	
			Flow (\$M)	Flow/AUM	Flow (\$M)	Flow/AUM
1 RBC iShares	\$93,321	30.9%	\$2,641	3%	\$7,138	9%
2 BMO	\$79,548	26.3%	\$762	1%	\$6,955	9%
3 Vanguard	\$36,636	12.1%	\$606	2%	\$6,026	19%
4 Horizons	\$18,676	6.2%	-\$371	-2%	\$654	4%
5 CI First Asset	\$15,035	5.0%	\$387	3%	\$2,366	20%
6 Mackenzie*	\$10,773	3.6%	\$218	2%	\$2,129	25%
7 TDAM	\$7,519	2.5%	\$127	2%	\$2,218	50%
8 Purpose	\$5,224	1.7%	\$75	2%	\$1,082	25%
9 NBI	\$4,637	1.5%	\$42	1%	\$1,282	40%
10 Invesco	\$4,369	1.4%	\$33	1%	\$26	1%
11 Dynamic	\$2,902	1.0%	\$14	0%	\$320	14%
12 Fidelity	\$2,640	0.9%	\$51	2%	\$413	19%
13 CIBC	\$2,389	0.8%	\$36	2%	\$863	59%
14 Franklin Templeton	\$2,251	0.7%	-\$65	-3%	-\$70	-3%
15 Manulife	\$2,140	0.7%	\$29	1%	\$516	36%
16 PIMCO	\$2,030	0.7%	\$31	2%	\$299	17%
17 Desjardins	\$1,956	0.6%	\$28	1%	\$698	61%
18 Harvest	\$1,758	0.6%	\$59	4%	\$622	63%
19 Evolve Funds	\$1,572	0.5%	\$33	2%	\$239	19%
20 3IQ	\$1,566	0.5%	\$16	1%	\$1,707	NA
21 AGF	\$1,240	0.4%	\$0	0%	-\$60	-5%
22 Hamilton	\$817	0.3%	\$59	8%	\$401	124%
23 Scotia Bank	\$585	0.2%	\$53	10%	\$436	414%
24 Pictou Mahoney	\$441	0.1%	\$9	2%	\$206	91%
25 First Trust	\$381	0.1%	\$11	3%	\$28	9%
26 Brompton Funds	\$365	0.1%	\$13	4%	\$41	14%
27 Bristol Gate	\$334	0.1%	\$3	1%	\$44	18%
28 Emerge	\$302	0.1%	-\$7	-2%	\$131	64%
29 Middlefield	\$265	0.1%	\$1	0%	\$13	6%
30 Ninepoint Partners	\$219	0.1%	\$20	11%	\$98	NA
31 IA Clarington	\$134	0.0%	\$10	8%	\$40	44%
32 Guardian Capital	\$122	0.0%	\$9	8%	\$58	106%
33 Lysander	\$93	0.0%	\$3	3%	\$13	20%
34 Accelerate	\$49	0.0%	-\$2	-4%	\$25	112%
35 Russell Investments	\$48	0.0%	\$2	5%	\$27	134%
36 Starlight	\$39	0.0%	\$2	5%	\$6	20%
37 Arrow Capital	\$34	0.0%	\$1	4%	\$7	28%
38 SmartBe	\$29	0.0%	\$2	9%	-\$12	-31%
39 NCM Investments	\$6	0.0%	\$0	0%	\$3	NA
40 Caldwell	\$5	0.0%	\$0	0%	\$0	8%
Total	\$302,452	100.0%	\$4,942	1.7%	\$36,986	14.4%

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

Table 3: New Launches - August 2021

Name	Ticker	Focus
1 Accelerate Carbon-Negative Bitcoin ETF	ABTC*	Bitcoin
2 CI Alternative Diversified Opportunities Fund	CMDO*	Multi-Asset
3 CI Canadian Equity Index ETF	CCDN	Canadian Equity
4 CI Global Healthcare Leaders Index ETF	CHCL/B	Healthcare
5 CI US 500 Index ETF	CUSA/B	U.S. Equity
6 CI US 1000 Index ETF	CUSM/B	U.S. Equity
7 CI Global Alpha Innovation Etf	CINV*	Innovation
8 CI US Treasury Inflation-Linked Bond Index ETF CAD-H	CTIP	TIPS
9 CI Emerging Markets Alpha ETF	CIEM*	Emerging Markets
10 IA Clarington Loomis Global Multisector Bond Fund/ETF	ILGB	Global Bond
11 iShares ESG Advanced 1-5 Year Canadian Corporate Bond	XSHG	ESG Bond
12 iShares US Aggregate Bond Index ETF	XAGG**	U.S. Agg Bond
13 iShares ESG Advanced Canadian Corporate Bond Index ETF	XCBG	ESG Bond

*USD unit available; **USD and CAD-hedged unit available. Source: NBF, SEDAR, ETF Providers

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

Table 4 - Top Single Long ETF Inflows - August 2021

Ticker	Name	Flow (\$M)	Flow/AUM
1 XIU	iShares S&P/TSX 60 Index ETF	\$1,270	12%
2 XUS	iShares Core S&P 500 Index ETF	\$672	18%
3 XIC	iShares Core S&P/TSX Capped Composite Index ETF	\$367	4%
4 FSF	CI Global Financial Sector ETF	\$160	19%
5 ZSP	BMO S&P 500 Index ETF	\$159	2%
6 ZEB	BMO Equal Weight Banks Index ETF	\$147	10%
7 HXCN	Horizons S&P/TSX Capped Composite Index ETF	\$134	8%
8 VVF	Vanguard S&P 500 Index ETF	\$125	2%
9 QUU	Mackenzie US Large Cap Equity Index ETF	\$117	9%
10 VGRO	Vanguard Growth ETF Portfolio	\$88	3%
11 TPU	TD US Equity Index ETF	\$84	6%
12 ZMU	BMO Mid-Term US IG Corporate Bond Hedged to CAD Index ETF	\$75	4%
13 XEF	iShares Core MSCI EAFE IMI Index ETF	\$72	2%
14 ETHX/B	CI Galaxy Ethereum ETF	\$71	24%
15 HBB	Horizons Cdn Select Universe Bond ETF	\$70	5%
16 VEQT	Vanguard All-Equity ETF Portfolio	\$69	5%
17 CCDN	CI Canadian Equity Index ETF	\$62	NA
18 ZWU	BMO Covered Call Utilities ETF	\$60	5%
19 ETHX/U	CI Galaxy Ethereum ETF	\$60	44%
20 ZEA	BMO MSCI EAFE Index ETF	\$57	1%

Source: National Bank of Canada, Bloomberg;

Table 5 - Top Single Long ETF Outflows - August 2021

Ticker	Name	Flow (\$M)	Flow/AUM
1 HXS	Horizons S&P 500 Index ETF	-\$208	-9%
2 XFN	iShares S&P/TSX Capped Financials Index ETF	-\$202	-13%
3 HXEM	Horizons Emerging Markets Equity Index ETF	-\$188	-59%
4 HSAX	Horizons Cash Maximizer ETF	-\$134	-10%
5 ZUE	BMO S&P 500 Hedged to CAD Index ETF	-\$91	-5%
6 HXDM	Horizons International Developed Markets Equity Index ETF	-\$66	-8%
7 WXM	CI Morningstar Canada Momentum Index ETF	-\$59	-7%
8 XSU	iShares U.S. Small Cap Index ETF CAD-Hedged	-\$49	-9%
9 ESGY	BMO MSCI USA ESG Leaders Index ETF	-\$40	-5%
10 ZEO	BMO Equal Weight Oil & Gas Index ETF	-\$39	-21%
11 ESGY/F	BMO MSCI USA ESG Leaders Index ETF	-\$38	-5%
12 FLUS	Franklin Liberty US Equity Index Etf	-\$36	-33%
13 VXM/B	CI Morningstar International Value Index ETF	-\$35	-6%
14 XEG	iShares S&P/TSX Capped Energy Index ETF	-\$34	-3%
15 FLAM	Franklin FTSE US Index ETF	-\$32	-7%
16 ZPAY/F	BMO Premium Yield ETF	-\$32	-52%
17 TTP	TD Canadian Equity Index ETF	-\$32	-2%
18 FHI	CI Health Care Giants Covered Call ETF	-\$31	-37%
19 IGLB	IA Clarington Global Bond Fund - ETF	-\$24	-100%
20 ZGB	BMO Government Bond Index ETF	-\$21	-2%

Source: National Bank of Canada, Bloomberg;

Table 6 - ETF Flows by Category - August 2021

Asset Class	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Equity	\$194,792	64%	\$3,492	1.9%
Fixed Income	\$85,413	28%	\$905	1.1%
Commodities	\$2,090	1%	-\$14	-0.7%
Multi-Asset	\$14,137	5%	\$345	2.5%
Inverse / Levered	\$1,423	0%	\$12	0.8%
Crypto-Asset	\$4,598	2%	\$202	5.9%
Total	\$302,452	100%	\$4,942	1.7%

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

Table 7 - Equity ETF Flows by Geography - August 2021

Geography	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada	\$70,994	36%	\$1,985	2.9%
United States	\$67,132	34%	\$947	1.5%
DM: Broad	\$22,296	11%	\$219	1.0%
DM: Regional & Country	\$5,647	3%	\$38	0.7%
Emerging Markets	\$6,640	3%	-\$133	-2.0%
Global	\$22,083	11%	\$436	2.1%
Total	\$194,792	100%	\$3,492	1.9%

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

Table 8 - Equity ETF Flows by Sector* - August 2021

Sector	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Financials	\$8,978	34%	\$150	1.7%
Real Estate	\$3,922	15%	\$25	0.5%
Technology	\$3,603	14%	\$52	1.6%
Materials	\$2,489	10%	\$34	1.3%
Health Care	\$2,406	9%	\$0	0.0%
Utilities	\$2,142	8%	\$77	3.7%
Energy	\$1,984	8%	-\$34	-1.7%
Other	\$672	3%	-\$8	-1.2%
Total	\$26,197	100%	\$296	1.2%

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

Table 9 - Equity ETF Flows by Focus - August 2021

Focus	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Cap-weighted	\$116,730	60%	\$2,912	2.6%
Dividend / Income	\$19,410	10%	\$52	0.3%
Factor: Low Vol	\$8,753	4%	\$120	1.4%
Factor: Multi-factor	\$4,194	2%	-\$48	-1.2%
Factor: Fundamental	\$4,963	3%	\$61	1.3%
Sector	\$26,197	13%	\$296	1.2%
Thematic	\$10,016	5%	\$27	0.3%
Other	\$4,529	2%	\$72	1.7%
Total	\$194,792	100%	\$3,492	1.9%

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

Table 10 - Fixed Income ETF Flows by Type - August 2021

Type	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada Aggregate	\$25,412	30%	\$291	1.2%
Canada Government	\$9,359	11%	\$149	1.6%
Canada Corporate	\$14,280	17%	\$236	1.7%
U.S. / North America	\$7,276	9%	\$118	1.6%
Foreign	\$10,471	12%	\$102	1.0%
Sub-Investment Grade	\$4,326	5%	\$13	0.3%
Preferred/Convertible	\$8,639	10%	\$69	0.8%
Cash Alternative	\$5,650	7%	-\$72	-1.3%
Total	\$85,413	100%	\$905	1.1%

Source: National Bank of Canada, Bloomberg

Table 11 - Fixed Income ETF Flows by Maturity - August 2021

Maturity	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Broad/Mixed	\$46,572	55%	\$510	1.1%
Ultra Short Term	\$3,805	4%	\$19	0.5%
Short Term	\$18,853	22%	\$239	1.3%
Mid Term	\$5,116	6%	\$77	1.5%
Long Term	\$3,838	4%	\$107	2.8%
Real Return	\$1,464	2%	\$26	1.8%
Target Maturity	\$114	0%	-\$2	-1.6%
Cash Alternative	\$5,650	7%	-\$72	-1.3%
Total	\$85,413	100%	\$905	1.1%

Source: National Bank of Canada, Bloomberg

YTD August 2021 ETF Flows: Tables 12 - 19

The themes that define Canadian ETF flows YTD 2021 are distributed across the leaderboard tables: Bitcoin, ESG, broad-based Equity, short-term bond and asset-allocation portfolios are all popular, while cash alternative, emerging market equity and gold equity ETFs witnessed withdrawals.

The Equity asset class has been dominating inflows for the first half of 2021, taking up 58%, or \$21 billion of the year’s flows, so far. Market cap-weighted ETFs occupy just under half of total Equity flows, while certain sectors (technology and financials) and themes (ESG, travel & leisure and disruptive innovation) have also made major contributions. Dividend and

factor-based ETFs have dropped in mindshare in a relative sense, though they too have seen positive inflows that in any other year would have topped the leaderboards.

Fixed income ETFs amassed \$6.3 billion. All major bond categories have been gathering assets year-to-date, but cash alternative ETFs have suffered net outflows of \$1.3 billion as investors have been deploying towards riskier asset classes.

Crypto-Asset ETFs amassed \$4.6 billion year-to-date. This category enjoyed gangbuster inflows right out of the gate, some of which might have come from investors switching from closed-end crypto-asset funds to ETFs. However, the frenzy took a pause quickly after a 50% drawdown in this asset class in May, before ticking back up in August.

Multi-Asset ETF inflows stand at \$4.1 billion year-to-date. Desjardins' market neutral ETF, Vanguard and iShares's asset allocation portfolio ETFs were the most popular ETFs in this category.

Table 12 - Top ETF Inflows - YTD August 2021			
Ticker	Name	Flow (\$M)	Flow/AUM
1 ZCN	BMO S&P/TSX Capped Composite Index ETF	\$1,461	32%
2 BTCQ	3IQ CoinShares Bitcoin ETF	\$1,322	NA
3 TEC	TD Global Technology Leaders Index ETF	\$1,197	207%
4 VFV	Vanguard S&P 500 Index ETF	\$1,155	31%
5 XIU	iShares S&P/TSX 60 Index ETF	\$1,095	12%
6 VGRO	Vanguard Growth ETF Portfolio	\$913	51%
7 ZAG	BMO Aggregate Bond Index ETF	\$893	16%
8 BTCC/B	Purpose Bitcoin ETF	\$819	NA
9 ZGB	BMO Government Bond Index ETF	\$751	145%
10 XSB	iShares Core Canadian Short Term Bond Index ETF	\$747	29%
11 ESGY	BMO MSCI USA ESG Leaders Index ETF	\$739	2323%
12 XEF	iShares Core MSCI EAFE IMI Index ETF	\$707	16%
13 HXCN	Horizons S&P/TSX Capped Composite Index ETF	\$688	78%
14 ESGY/F	BMO MSCI USA ESG Leaders Index ETF	\$668	NA
15 VEQT	Vanguard All-Equity ETF Portfolio	\$668	117%
16 DANC	Desjardins Alt Long/Short Equity Market Neutral ETF	\$610	285%
17 XIC	iShares Core S&P/TSX Capped Composite Index ETF	\$608	8%
18 XUS	iShares Core S&P 500 Index ETF	\$574	17%
19 ZEA	BMO MSCI EAFE Index ETF	\$558	13%
20 XSH	iShares Core Canadian Short Term Corporate Bond Index ETF	\$556	44%

Source: National Bank of Canada, Bloomberg;

Table 13 - Top ETF Outflows - YTD August 2021			
Ticker	Name	Flow (\$M)	Flow/AUM
1 ZUE	BMO S&P 500 Hedged to CAD Index ETF	-\$896	-40%
2 PSA	Purpose High Interest Savings ETF	-\$671	-27%
3 CSAV	CI High Interest Savings ETF	-\$608	-23%
4 HXEM	Horizons Emerging Markets Equity Index ETF	-\$466	-77%
5 XGGB	iShares Global Government Bond Index ETF CAD Hedged	-\$358	-64%
6 HISA	High Interest Savings Account Fund	-\$288	-55%
7 FQC	CI MSCI Canada Quality Index Class ETF	-\$251	-94%
8 ZEM	BMO MSCI Emerging Markets Index ETF	-\$237	-10%
9 QUIG	Mackenzie US Investment Grade Corporate Bond CAD-H	-\$233	-35%
10 ZGD	BMO Equal Weight Global Gold Index ETF	-\$223	-65%
11 ZPL	BMO Long Provincial Bond Index ETF	-\$216	-40%
12 ZFM	BMO Mid Federal Bond Index ETF	-\$202	-39%
13 FLUS	Franklin Libertyqt US Equity Index Etf	-\$194	-78%
14 ZSP	BMO S&P 500 Index ETF	-\$194	-2%
15 WXM	CI Morningstar Canada Momentum Index ETF	-\$193	-24%
16 CLG	iShares 1-10 Year Laddered Government Bond Index ETF	-\$161	-31%
17 HXS	Horizons S&P 500 Index ETF	-\$153	-7%
18 XSP	iShares Core S&P 500 Index ETF CAD- Hedged	-\$152	-2%
19 FHI	CI Health Care Giants Covered Call ETF	-\$142	-79%
20 HAB	Horizons Active Corporate Bond ETF	-\$142	-23%

Source: National Bank of Canada, Bloomberg

Tables continue on the next page

Table 14 - ETF Flows by Category - YTD August 2021

Asset Class	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Equity	\$194,792	64%	\$21,511	14%
Fixed Income	\$85,413	28%	\$6,265	7%
Commodities	\$2,090	1%	\$312	17%
Multi-Asset	\$14,137	5%	\$4,124	45%
Inverse / Leveraged	\$1,423	0%	\$201	17%
Crypto-Asset	\$4,598	2%	\$4,573	NA
Total	\$302,452	100%	\$36,986	14.4%

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

Table 15 - Equity ETF Flows by Geography - YTD August 2021

Geography	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada	\$70,994	36%	\$7,815	14%
United States	\$67,132	34%	\$5,397	10%
DM: Broad	\$22,296	11%	\$2,817	14%
DM: Regional & Country	\$5,647	3%	\$724	14%
Emerging Markets	\$6,640	3%	-\$97	-1%
Global	\$22,083	11%	\$4,854	32%
Total	\$194,792	100%	\$21,511	13.6%

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

Table 16 - Equity ETF Flows by Sector* - YTD August 2021

Sector	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Financials	\$8,978	34%	\$1,527	22%
Real Estate	\$3,922	15%	\$221	7%
Technology	\$3,603	14%	\$1,345	80%
Materials	\$2,489	10%	\$61	2%
Health Care	\$2,406	9%	\$131	7%
Utilities	\$2,142	8%	\$399	24%
Energy	\$1,984	8%	\$186	13%
Other	\$672	3%	\$125	27%
Total	\$26,197	100%	\$3,997	20%

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

Table 17 - Equity ETF Flows by Focus - YTD August 2021

Focus	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Cap-weighted	\$116,730	60%	\$10,486	11%
Dividend / Income	\$19,410	10%	\$1,646	10%
Factor: Low Vol	\$8,753	4%	-\$366	-4%
Factor: Multi-factor	\$4,194	2%	\$26	1%
Factor: Fundamental	\$4,963	3%	\$719	20%
Sector	\$26,197	13%	\$3,997	20%
Thematic	\$10,016	5%	\$3,817	75%
Other	\$4,529	2%	\$1,187	43%
Total	\$194,792	100%	\$21,511	13.6%

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

Table 18 - Fixed Income ETF Flows by Type - YTD August 2021

Type	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada Aggregate	\$25,412	30%	\$2,309	9%
Canada Government	\$9,359	11%	\$573	6%
Canada Corporate	\$14,280	17%	\$1,956	15%
U.S. / North America	\$7,276	9%	\$306	3%
Foreign	\$10,471	12%	\$1,416	15%
Sub-Investment Grade	\$4,326	5%	\$540	11%
Preferred/Convertible	\$8,639	10%	\$455	6%
Cash Alternative	\$5,650	7%	-\$1,291	-18%
Total	\$85,413	100%	\$6,265	7.2%

Source: National Bank of Canada, Bloomberg

Table 19 - Fixed Income ETF Flows by Maturity - YTD August 2021

Maturity	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Broad/Mixed	\$46,572	55%	\$4,571	10%
Ultra Short Term	\$3,805	4%	\$421	12%
Short Term	\$18,853	22%	\$2,615	16%
Mid Term	\$5,116	6%	-\$128	-2%
Long Term	\$3,838	4%	-\$100	-2%
Real Return	\$1,464	2%	\$168	13%
Target Maturity	\$114	0%	\$10	2%
Cash Alternative	\$5,650	7%	-\$1,291	-18%
Total	\$85,413	100%	\$6,265	7.2%

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 2020 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.

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.

DISCLOSURES

Levered and Inverse Exchange-Traded Funds are very different from most ETFs. They pursue leveraged investment goals, and they are riskier than alternatives that do not use leverage because they magnify the performance of the benchmark on an investment. These ETFs seek daily leveraged investment results. The return of an inverse or levered ETF for periods longer than a single day, especially in periods of market volatility, may be completely uncorrelated to the return of the benchmark over such longer periods. Levered and inverse ETFs are intended to be used as short-term trading vehicles for investors managing their portfolios on a daily basis. They are not to be used by, and are not appropriate for, investors who intend to hold positions.

Unless otherwise agreed in writing, National Bank of Canada and its affiliates act solely in the capacity of an arm's length contractual counterparty and not as an adviser or fiduciary. Accordingly you should not regard transaction proposals or other written or oral communications from us as a recommendation or advice that a transaction is appropriate for you or meets your financial objectives. Any financial transaction involves a variety of potentially significant risks and issues; additionally, please note bitcoin and other crypto assets are extremely risky and highly speculative. Before entering into any financial transaction, you should ensure that you fully understand the terms, have evaluated the risks and have determined that the transaction is appropriate for you in all respects. If you believe that you need assistance, you should consult appropriate advisers before entering into the transaction. The attached material does not constitute an offer to enter into any transaction. Such material is believed by us to be reliable, but we make no representation as to its accuracy or completeness. This brief statement does not purport to describe all of the risks associated with financial transactions and should not be construed as advice to you.

General

This Report was prepared by National Bank Financial Inc. (NBF), a Canadian investment dealer, a dealer member of IIROC and an indirect wholly owned subsidiary of National Bank of Canada. National Bank of Canada is a public company listed on the Toronto Stock Exchange.

The particulars contained herein were obtained from sources which we believe to be reliable but are not guaranteed by us and may be incomplete and may be subject to change without notice. The information is current as of the date of this document. Neither the author nor NBF assumes any obligation to update the information or advise on further developments relating to the topics or securities discussed. The opinions expressed are based upon the author(s) analysis and interpretation of these particulars and are not to be construed as a solicitation or offer to buy or sell the securities mentioned herein, and nothing in this Report constitutes a representation that any investment strategy or recommendation contained herein is suitable or appropriate to a recipient's individual circumstances. In all cases, investors should conduct their own investigation and analysis of such information before taking or omitting to take any action in relation to securities or markets that are analyzed in this Report. The Report alone is not intended to form the basis for an investment decision, or to replace any due diligence or analytical work required by you in making an investment decision.

This Report is for distribution only under such circumstances as may be permitted by applicable law. This Report is not directed at you if NBF or any affiliate distributing this Report is prohibited or restricted by any legislation or regulation in any jurisdiction from making it available to you.

National Bank of Canada Financial Markets is a trade name used by National Bank Financial Inc. and National Bank of Canada Financial Inc.

Research Analysts

The Research Analyst(s) who prepared these reports certify that their respective report accurately reflects his or her personal opinion and that no part of his/her compensation was, is, or will be directly or indirectly related to the specific recommendations or views as to the securities or companies.

NBF compensates its Research Analysts from a variety of sources. The Research Department is a cost centre and is funded by the business activities of NBF including Institutional Equity Sales and Trading, Retail Sales, the correspondent clearing business, and Corporate and Investment Banking. Since the revenues from these businesses vary, the funds for research compensation vary. No one business line has a greater influence than any other for Research Analyst compensation.

Canadian Residents

NBF or its affiliates may engage in any trading strategies described herein for their own account or on a discretionary basis on behalf of certain clients and, as market conditions change, may amend or change investment strategy including full and complete divestment. The trading interests of NBF and its affiliates may also be contrary to any opinions expressed in this Report.

NBF or its affiliates often act as financial advisor, agent, lender or underwriter or provides trading related services for certain issuers mentioned herein and may receive remuneration for its services. As well, NBF and its affiliates and/or their officers, directors, representatives, associates, may have a position in the securities mentioned herein and may make purchases and/or sales of these securities from time to time in the open market or otherwise. NBF and its affiliates may make a market in securities mentioned in this Report. This Report may not be independent of the proprietary interests of NBF and its affiliates.

NBF is a member of the Canadian Investor Protection Fund.

UK Residents

This Report is a marketing document. This Report has not been prepared in accordance with EU legal requirements designed to promote the independence of investment research and it is not subject to any prohibition on dealing ahead of the dissemination of investment research. In respect of the distribution of this Report to UK residents, NBF has approved the contents (including, where necessary, for the purposes of Section 21(1) of the Financial Services and Markets Act 2000).

This Report is for information purposes only and does not constitute a personal recommendation, or investment, legal or tax advice. NBF makes no representation as to the proper characterization of the investments for legal, regulatory or tax purposes, or as to the ability of a particular investor to invest or transact in the investments under applicable legal restrictions.

If securities are offered by an issuer in a foreign jurisdiction, or the security is structured through a foreign special-purpose-vehicle, or you purchase securities that are issued by foreign issuers, your investment and continued holding of securities may be subject to the laws and regulations of more than one jurisdiction. There may be differences in legal and regulatory regimes across different jurisdictions which may significantly impact the legal and regulatory risks affecting the investment sector and / or investment.

NBF and/or its parent and/or any companies within or affiliates of the National Bank of Canada group and/or any of their directors, officers and employees may have or may have had interests or long or short positions in, and may at any time make purchases and/or sales as principal or agent, or may act or may have acted as market maker in the relevant investments or related investments discussed in this Report, or may act or have acted as investment and/or commercial banker with respect hereto. The value of investments, and the income derived from them, can go down as well as up and you may not get back the amount invested. Past performance is not a guide to future performance. If an investment is denominated in a

foreign currency, rates of exchange may have an adverse effect on the value of the investment. Investments which are illiquid may be difficult to sell or realise; it may also be difficult to obtain reliable information about their value or the extent of the risks to which they are exposed. Certain transactions, including those involving futures, swaps, and other derivatives, give rise to substantial risk and are not suitable for all investors. The investments contained in this Report are not available to retail customers and this Report is not for distribution to retail clients (within the meaning of the rules of the Financial Conduct Authority). Persons who are retail clients should not act or rely upon the information in this Report. This Report does not constitute or form part of any offer for sale or subscription of or solicitation of any offer to buy or subscribe for the securities described herein nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever.

This information is only for distribution to Eligible Counterparties and Professional Clients in the United Kingdom within the meaning of the rules of the Financial Conduct Authority. NBF is authorized and regulated by the Financial Conduct Authority and has its registered office at 70 St. Mary Axe, London, EC3A 8BE.

NBF is not authorized by the Prudential Regulation Authority and the Financial Conduct Authority to accept deposits in the United Kingdom.

U.S. Residents

With respect to the distribution of this report in the United States of America, National Bank of Canada Financial Inc. ("NBCFI") is registered with the Securities Exchange Commission (SEC), the Financial Industry Regulatory Authority (FINRA), and is a member of the Securities Investor Protection Corporation (SIPC). NBCFI operates pursuant to a 15 a-6 Agreement with its Canadian affiliates, NBF and National Bank of Canada.

This report has been prepared in whole or in part by research analysts employed by non-US affiliates of NBCFI that are not registered as broker/dealers in the US. These non-US research analysts are not registered as associated persons of NBCFI and are not licensed or qualified as research analysts with FINRA or any other US regulatory authority and, accordingly, may not be subject (among other things) to FINRA restrictions regarding communications by a research analyst with the subject company, public appearances by research analysts and trading securities held in a research analyst account.

All of the views expressed in this research report accurately reflects the research analyst's personal views regarding any and all of the subject securities or issuers. No part of the analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report. The analyst responsible for the production of this report certifies that the views expressed herein reflect his or her accurate personal and technical judgment at the moment of publication.

Because the views of analysts may differ, members of the National Bank Financial Group may have or may in the future issue reports that are inconsistent with this report, or that reach conclusions different from those in this report. To make further inquiry related to this report, United States residents should contact their NBCFI registered representative.

HK Residents

With respect to the distribution of this report in Hong Kong by NBC Financial Markets Asia Limited ("NBCFMA") which is licensed by the Securities and Futures Commission ("SFC") to conduct Type 1 (dealing in securities) and Type 3 (leveraged foreign exchange trading) regulated activities, the contents of this report are solely for informational purposes. It has not been approved by, reviewed by, verified by or filed with any regulator in Hong Kong. Nothing herein is a recommendation, advice, offer or solicitation to buy or sell a product or service, nor an official confirmation of any transaction. None of the products issuers, NBCFMA or its affiliates or other persons or entities named herein are obliged to notify you of changes to any information and none of the foregoing assume any loss suffered by you in reliance of such information.

The content of this report may contain information about investment products which are not authorized by SFC for offering to the public in Hong Kong and such information will only be available to those persons who are Professional Investors (as defined in the Securities and Futures Ordinance of Hong Kong ("SFO")). If you are in any doubt as to your status you should consult a financial adviser or contact us. This material is not meant to be marketing materials and is not intended for public distribution. Please note that neither this material nor the product referred to is authorized for sale by SFC. Please refer to product prospectus for full details.

There may be conflicts of interest relating to NBCFMA or its affiliates' businesses. These activities and interests include potential multiple advisory, transactional and financial and other interests in securities and instruments that may be purchased or sold by NBCFMA or its affiliates, or in other investment vehicles which are managed by NBCFMA or its affiliates that may purchase or sell such securities and instruments.

No other entity within the National Bank of Canada group, including National Bank of Canada and National Bank Financial Inc., is licensed or registered with the SFC. Accordingly, such entities and their employees are not permitted and do not intend to: (i) carry on a business in any regulated activity in Hong Kong; (ii) hold themselves out as carrying on a business in any regulated activity in Hong Kong; or (iii) actively market their services to the Hong Kong public.

Copyright

This Report may not be reproduced in whole or in part, or further distributed or published or referred to in any manner whatsoever, nor may the information, opinions or conclusions contained in it be referred to without in each case the prior express written consent of NBF.

Dissemination policy

[Please click on this link to access NBF's Research Dissemination Policy.](#)