

May 2023: Japan, Emerging Market, and the Evergreen Money Market ETFs

- \$2.6 billion flowed into Canadian ETFs in May, primarily into Fixed Income ETFs
- U.S. equities were on the outs while Canada, EM, Japan, Global regions all registered inflows
- Money market ETFs continued to rake in money with close to \$1 billion created
- A whopping 27 ETFs were launched in May, bringing the total number to 1,346.

Summary: It's another month of inflows for Fixed Income ETFs with \$1.9 billion created led by Money Market products. Equity Inflow is mixed: Canada and international regional inflows were offset by the outflows from U.S. ETFs, which suffered \$488 million in redemptions. Multi-Asset ETFs continued to take in new money whereas Crypto-Asset ETFs bled \$81 million. Commodities ETF flows were muted.

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

Equity ETFs pulled in \$584 million overall. The U.S. was out of favour with \$488 million redeemed led by broad market U.S. equity ETFs (ZSP, XUS, XQQ). Among Canada equity ETFs, financial sector ETFs (ZEB, HMAX) gained traction late in the month; the big Canadian banks unveiled disappointing second-quarter earnings in May and their share prices underperformed as a result, but ETF investors were undeterred. They allocated to the sector with inflows over \$300 mln (Table 8, Page 3). The Canadian energy sector (e.g., XEG) ranked second place in terms of sector flows, followed by the utilities. International Equity had \$433 million inflows, and within this space Emerging Market (XEC) and Japan (ZJPN, JAPN/B) shared the driver's seat. New all-time highs for the Japanese stock market may have drawn some inflows into this region. The Dividend/Income ETF category (VDY, IDIV/B) registered \$254 million inflows, speaking to the persistent demand for income from equity investors.

Fixed Income ETFs topped the inflow leaderboard again with \$1.9 billion created. Money market ETFs maintained their grip on investor mindshare with close to \$1 billion in creations. Top inflows went to CSAV, CBIL, CASH and ZMMK. Canadian aggregate bond ETFs like XBB, ZAG ETFs welcomed \$522 million in flows. Sub-investment grade bond and preferred share ETFs continued to suffer redemptions.

Multi-asset ETFs welcomed inflows of \$156 million primarily into the evergreen asset allocation strategies that never experienced outflows even during the "perfect storm" of 2022 when rates skyrocketed while stock markets fell, making for the worst year ever for multi-asset stock/bond portfolios from a returns perspective.

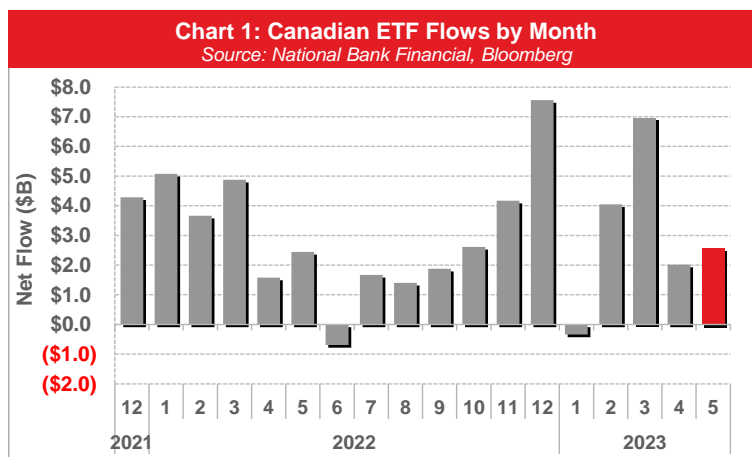


Table 1 - ETF Flows by Category - May YTD 2023

	AUM (\$M)	Mkt Shr (%)	May 2023		May YTD 2023	
			Flow \$M	Flow/AUM	Flow \$M	Flow/AUM
Equity	\$208,353		\$584	0.3%	\$4,716	2.2%
Canada	\$75,161	22%	\$640	0.8%	\$1,651	2.1%
United States	\$71,423	21%	-\$488	-0.7%	-\$1,592	-2.1%
International	\$61,769	18%	\$433	0.7%	\$4,658	7.6%
Fixed Income	\$106,217	31%	\$1,864	1.8%	\$9,232	8.8%
Commodities	\$1,687	0%	\$5	0.3%	-\$43	-2.6%
Multi-Asset	\$17,310	5%	\$156	0.9%	\$1,163	7.4%
Inverse / Levered	\$3,389	1%	\$42	1.2%	\$539	18.0%
Crypto-Asset	\$2,251	1%	-\$81	-3.3%	-\$302	-17.9%
Total	\$339,207	100%	\$2,570	0.7%	\$15,306	4.5%

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

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

The May inflows were quite concentrated in a few ETF issuers with several others suffering outflows. BMO and Mackenzie in the top ten ETF issuers each had small amounts of redemptions.

A whopping 27 ETFs were launched in May, the most since October 2022. The new products span a wide range of mandates, including discount bonds, money market ETFs, target date bond, asset allocation, dividend and thematic equity, and option-based ETFs.

Note: the tables below all use the adjusted flows calculation methodology. (Adjusted for ETF cross-holdings)

Table 2 - ETF Flows by Provider - May 2023							Table 3 - New Launches in May 2023			
Provider	New Methodology (adjusted for ETF-of-ETFs)			Unadjusted			Ticker	Name	Fee (%)	
	AUM (\$M)	Mkt Shr (%)	May 2023 Flow (\$M)	May 2023 Flow/AUM	AUM (\$M)	May 2023 Flow (\$M)				
1	RBC iShares	\$94,751	27.9%	\$751	1%	\$100,980	1	RUDB	RBC U.S. Discount Bond ETF	0.25
2	BMO	\$82,953	24.5%	-\$11	0%	\$92,171	2	RUDB.U	RBC U.S. Discount Bond ETF (USD Units)	0.25
3	Vanguard	\$43,911	12.9%	\$379	1%	\$54,205	3	RDBH	RBC U.S. Discount Bond (CAD Hedged) ETF	0.25
4	Horizons	\$24,868	7.3%	\$183	1%	\$25,684	4	RUDC.U	RBC U.S. Dividend Covered Call ETF (USD Units)	0.64
5	CI GAM	\$18,377	5.4%	\$211	1%	\$18,605	5	GDIV	Manulife Smart Global Dividend ETF Portfolio	0.35
6	Mackenzie*	\$12,606	3.7%	-\$86	-1%	\$12,868	6	GBND	Manulife Smart Global Bond ETF	0.40
7	TDAM	\$9,909	2.9%	\$298	3%	\$10,021	7	RGQL	RBC Target 2024 Government Bond ETF	0.15
8	NBI	\$9,157	2.7%	\$260	3%	\$9,157	8	RGQN	RBC Target 2025 Government Bond ETF	0.15
9	Purpose	\$7,428	2.2%	\$59	1%	\$7,671	9	RGQO	RBC Target 2026 Government Bond ETF	0.15
10	Invesco	\$5,204	1.5%	\$10	0%	\$5,222	10	RGQP	RBC Target 2027 Government Bond ETF	0.15
11	Fidelity	\$3,533	1.0%	\$64	2%	\$3,902	11	RGQQ	RBC Target 2028 Government Bond ETF	0.15
12	Evolve Funds	\$2,817	0.8%	\$78	3%	\$2,870	12	RGQR	RBC Target 2029 Government Bond ETF	0.15
13	Harvest	\$2,627	0.8%	\$44	2%	\$3,279	13	FINN	Fidelity Global Innovators ETF	0.85
14	CIBC	\$2,625	0.8%	\$5	0%	\$2,639	14	FINN.U	Fidelity Global Innovators ETF (USD Units)	0.85
15	Manulife	\$2,607	0.8%	\$179	7%	\$2,607	15	FCGC	Fidelity Greater Canada Fund	0.85
16	Dynamic	\$2,283	0.7%	\$54	2%	\$2,283	16	FCLC	Fidelity Canadian Larger Cap Fund	0.85
17	PIMCO	\$2,150	0.6%	\$33	2%	\$2,150	17	FCGS	Fidelity Global Small Cap Opportunities Fund	0.85
18	Hamilton	\$2,013	0.6%	\$86	4%	\$2,409	18	FCGS.U	Fidelity Global Small Cap Opportunities Fund (USD Units)	0.85
19	Desjardins	\$1,836	0.5%	-\$15	-1%	\$1,836	19	CCNV	CI Conservative Asset Allocation ETF	0.22
20	Scotia Bank	\$1,323	0.4%	-\$16	-1%	\$1,323	20	CBIN	CI Balanced Income Asset Allocation ETF	0.22
21	Franklin Templeton	\$1,258	0.4%	-\$12	-1%	\$1,258	21	CBAL	CI Balanced Asset Allocation ETF	0.22
22	AGF	\$1,159	0.3%	-\$1	0%	\$1,159	22	CBGR	CI Balanced Growth Asset Allocation ETF	0.22
23	Picton Mahoney	\$655	0.2%	\$28	4%	\$655	23	CGRO	CI Growth Asset Allocation ETF	0.22
24	Ninepoint Partners	\$589	0.2%	-\$9	-1%	\$589	24	CEQT	CI Equity Asset Allocation ETF	0.22
25	Brompton Funds	\$467	0.1%	-\$1	0%	\$564	25	BUFR	First Trust Cboe Vest Fund of Buffer ETF	0.15*
26	Middlefield	\$463	0.1%	\$31	7%	\$463	26	MCAD	Premium Cash Management Fund	0**
27	First Trust	\$367	0.1%	-\$7	-2%	\$368	27	MUSD.U	US Premium Cash Management Fund	0**
28	Bristol Gate	\$357	0.1%	-\$2	0%	\$357				
29	Guardian Capital	\$219	0.1%	\$1	0%	\$219				
30	Emerge	\$119	0.0%	\$0	0%	\$119				
31	3iQ	\$104	0.0%	-\$30	-21%	\$104				
32	IA Clarington	\$104	0.0%	\$2	2%	\$104				
33	Lysander	\$80	0.0%	\$0	0%	\$80				
34	Mulvihill	\$71	0.0%	\$2	2%	\$71				
35	Russell Investments	\$69	0.0%	\$1	1%	\$69				
36	Accelerate	\$59	0.0%	-\$1	-1%	\$64				
37	Arrow Capital	\$46	0.0%	\$1	2%	\$46				
38	Starlight	\$24	0.0%	\$0	2%	\$24				
39	SmartBe	\$14	0.0%	-\$1	-7%	\$14				
40	Caldwell	\$5	0.0%	\$0	0%	\$5				
41	NCM Investments	\$0.1	0.0%	\$0	0%	\$0.1				
Total	\$339,207	100.0%	\$2,570	0.7%	\$368,214	\$2,851				

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

Tables continue on the next page

Table 4 - Top Single Long ETF Inflows - May 2023

Ticker	Name	Flow (\$M)	Flow/AUM
1	XEC iShares Core MSCI Emerging Markets IMI Index ETF	\$377	41%
2	ZEB BMO Equal Weight Banks Index ETF	\$319	11%
3	CSAV CI High Interest Savings ETF	\$283	4%
4	XIU iShares S&P/TSX 60 Index ETF	\$201	2%
5	NSCB NBI Sustainable Canadian Bond ETF	\$199	31%
6	ZJPN BMO Japan Index ETF	\$197	48%
7	CBIL Horizons 0-3 Month T-Bill ETF	\$174	258%
8	CASH Horizons High Interest Savings ETF	\$155	6%
9	XBB iShares Core Canadian Universe Bond Index ETF	\$131	3%
10	ZAG BMO Aggregate Bond Index ETF	\$127	2%
11	IDIV/B Manulife Smart International Dividend ETF	\$123	581%
12	TTP TD Canadian Equity Index ETF	\$122	10%
13	TCLB TD Canadian Long Term Federal Bond ETF	\$105	6%
14	ZCS BMO Short Corporate Bond Index ETF	\$100	8%
15	JAPN/B CI WisdomTree Japan Equity Index ETF	\$99	20%
16	XEG iShares S&P/TSX Capped Energy Index ETF	\$91	5%
17	UBIL/U Horizons 0-3 Month US T-Bill ETF	\$85	91%
18	ZMMK BMO Money Market Fund ETF Series	\$71	13%
19	HMAX Hamilton Canadian Financials Yield Maximizer Etf	\$70	26%
20	VFV Vanguard S&P 500 Index ETF	\$70	1%

Source: National Bank of Canada, Bloomberg;

Table 5 - Top Single Long ETF Outflows - May 2023

Ticker	Name	Flow (\$M)	Flow/AUM
1	ZSP BMO S&P 500 Index ETF	-\$310	-4%
2	ZEA BMO MSCI EAFE Index ETF	-\$309	-5%
3	HXT Horizon S&P/TSX 60 Index ETF	-\$176	-5%
4	ZCN BMO S&P/TSX Capped Composite Index ETF	-\$138	-2%
5	XUS iShares Core S&P 500 Index ETF	-\$132	-3%
6	ZEM BMO MSCI Emerging Markets Index ETF	-\$125	-8%
7	FSF CI Global Financial Sector ETF	-\$94	-16%
8	ZCM BMO Mid Corporate Bond Index ETF	-\$66	-12%
9	QSB Mackenzie Canadian Short-Term Bond Index ETF	-\$63	-34%
10	XIC iShares Core S&P/TSX Capped Composite Index ETF	-\$58	-1%
11	XCB iShares Core Canadian Corporat	-\$48	-3%
12	HPR Horizons Active Preferred Share ETF	-\$41	-4%
13	BTCC/B Purpose Bitcoin ETF	-\$40	-8%
14	ESGY BMO MSCI USA ESG Leaders Index ETF	-\$40	-2%
15	FSB CI Enhanced Short Duration Bon	-\$39	-5%
16	QCB Mackenzie Canadian All Corporate Bond Index ETF	-\$38	-9%
17	MNY Purpose Cash Management Fund	-\$38	-20%
18	MFT Mackenzie Floating Rate Income ETF	-\$36	-5%
19	XQQ iShares NASDAQ 100 Index ETF CAD-Hedged	-\$36	-2%
20	ZSB BMO Short-Term Bond Index ETF	-\$33	-17%

Source: National Bank of Canada, Bloomberg;

Table 6 - ETF Flows by Category - May 2023

Asset Class	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Equity	\$208,353	61%	\$584	0.3%
Fixed Income	\$106,217	31%	\$1,864	1.8%
Commodities	\$1,687	0%	\$5	0.3%
Multi-Asset	\$17,310	5%	\$156	0.9%
Inverse / Levered	\$3,389	1%	\$42	1.2%
Crypto-Asset	\$2,251	1%	-\$81	-3.3%
Total	\$339,207	100%	\$2,570	0.7%

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

Table 7 - Equity ETF Flows by Geography - May 2023

Geography	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada	\$75,161	36%	\$640	0.8%
United States	\$71,423	34%	-\$488	-0.7%
DM: Broad	\$24,078	12%	-\$117	-0.5%
DM: Regional & Country	\$6,195	3%	\$311	5.2%
Emerging Markets	\$6,165	3%	\$279	4.4%
Global	\$25,331	12%	-\$40	-0.2%
Total	\$208,353	100%	\$584	0.3%

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

Table 8 - Equity ETF Flows by Sector* - May 2023

Sector	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Financials	\$10,307	37%	\$323	3.1%
Energy	\$3,213	12%	\$75	2.2%
Technology	\$3,081	11%	-\$9	-0.3%
Real Estate	\$2,921	11%	-\$43	-1.4%
Health Care	\$2,919	10%	\$7	0.2%
Utilities	\$2,521	9%	\$73	2.8%
Materials	\$2,209	8%	-\$62	-2.5%
Other	\$643	2%	-\$8	-1.3%
Total	\$27,812	100%	\$355	1.2%

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

Table 9 - Equity ETF Flows by Focus - May 2023

Focus	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Cap-weighted	\$120,398	58%	-\$276	-0.2%
Dividend / Income	\$22,573	11%	\$254	1.1%
Factor: Low Vol	\$7,859	4%	\$23	0.3%
Factor: Multi-factor	\$2,902	1%	\$38	1.3%
Factor: Fundamental	\$5,066	2%	\$25	0.5%
Sector	\$27,812	13%	\$355	1.2%
Thematic	\$14,699	7%	\$20	0.1%
ESG**	\$9,750	5%	-\$17	-0.2%
Other	\$7,044	3%	\$146	2.1%
Total	\$208,353	100%	\$584	0.3%

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

** Only includes ESG ETFs under Thematic category

Table 10 - Fixed Income ETF Flows by Type - May 2023

Type	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada Aggregate	\$30,097	28%	\$522	1.7%
Canada Government	\$12,742	12%	\$246	1.9%
Canada Corporate	\$13,468	13%	\$36	0.3%
U.S. / North America	\$9,020	8%	\$105	1.2%
Foreign	\$10,602	10%	\$136	1.3%
Sub-Investment Grade	\$3,946	4%	-\$42	-1.0%
Preferred/Convertible	\$5,557	5%	-\$111	-1.9%
Money Market	\$20,785	20%	\$973	4.9%
Total	\$106,217	100%	\$1,864	1.8%

Source: National Bank of Canada, Bloomberg

Table 11 - Fixed Income ETF Flows by Maturity - May 2023

Maturity	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Broad/Mixed	\$49,465	47%	\$611	1.2%
Ultra Short Term	\$4,078	4%	-\$45	-1.1%
Short Term	\$16,288	15%	-\$129	-0.8%
Mid Term	\$6,047	6%	\$88	1.4%
Long Term	\$7,116	7%	\$251	3.5%
Real Return	\$1,380	1%	\$2	0.1%
Target Maturity	\$1,056	1%	\$115	11.7%
Money Market	\$20,785	20%	\$973	4.9%
Total	\$106,217	100%	\$1,864	1.8%

Source: National Bank of Canada, Bloomberg

YTD May ETF Flows (Tables 12 - 21):

Canadian ETFs have taken in \$15 billion year-to-date, led by fixed income at \$9.2 billion with equity in a distant second place at \$4.7 billion created. Commodities and Crypto-Asset ETFs have each been bleeding assets this year, a curious pattern given that their performance has been recovering in 2023. Within equities, dividend/income ETFs, sector ETFs (Financials, Health Care), ESG, and non-ESG thematic products welcomed the lion's share of equity inflows. In terms of the latter category—non-ESG thematics—most of the inflow was driven by a single institutional allocation to **NREA**, NBI's Global Real Assets Income ETF.

All regions other than the U.S. have been enjoying inflows this year. Canada, broad developed market, emerging market, and global region each welcomed inflows of more than \$1 billion whereas U.S. bled \$1.6 billion in outflows led by ZSP even as the S&P 500 Index returned 10% in 2023 so far.

As for fixed income, the craze for money market or “cash-like” exposure seems unstoppable, especially now that these ETFs are yielding close to 5%. Money market ETFs had inflows of \$4.8 billion year-to-date, or 30% relative to 2022 year-end assets, followed by Canada government bond ETFs at \$2.2 billion, then Canada aggregate bond ETFs at \$1.3 billion. It would seem that Fixed Income ETF users are taking a barbell approach to investing - the ultra-short term and long-term ETFs had the largest inflows, whereas short-term ETFs have lost assets to outflows.

ESG ETF flows year to date, Table 20: ESG ETF **NSCB** (NBI sustainable bond ETF) received an institutional-sized order of \$199 million in May. Outside of **NSCB**, the inflows into ESG ETFs were muted last month.

Table 12 - Top ETF Inflows - May YTD 2023

Ticker	Name	Flow (\$M)	Flow/AUM
1	CSAV CI High Interest Savings ETF	\$2,044	39%
2	ZEA BMO MSCI EAFE Index ETF	\$1,146	21%
3	CASH Horizons High Interest Savings ETF	\$1,139	79%
4	NREA NBI Global Real Assets Income ETF	\$1,062	2325%
5	ZFL BMO Long Federal Bond Index ETF	\$849	43%
6	ZEB BMO Equal Weight Banks Index ETF	\$770	25%
7	XSEM iShares ESG Aware MSCI Emerging Markets Index ETF	\$656	1548%
8	HBB Horizons Cdn Select Universe Bond ETF	\$653	23%
9	TDB TD Canadian Aggregate Bond Index ETF	\$511	103%
10	HEB Hamilton Canadian Bank Equal-Weight Index ETF	\$493	NA
11	NSCB NBI Sustainable Canadian Bond ETF	\$475	136%
12	TCLB TD Canadian Long Term Federal Bond ETF	\$454	35%
13	HISA High Interest Savings Account Fund	\$418	39%
14	XEC iShares Core MSCI Emerging Markets IMI Index ETF	\$383	43%
15	TTP TD Canadian Equity Index ETF	\$375	39%
16	PFL Invesco 1-3 Year Laddered Floating Rate Note Index ETF	\$365	91%
17	HMAX Hamilton Canadian Financials Yield Maximizer Etf	\$356	NA
18	ZMU BMO Mid-Term US IG Corporate Bond CAD-H	\$351	14%
19	ZUAG/F BMO US Aggregate Bond Index ETF	\$338	NA
20	NSCE NBI Sustainable Canadian Equity ETF	\$299	22%

Source: National Bank of Canada, Bloomberg;

Table 13 - Top ETF Outflows - May YTD 2023

Ticker	Name	Flow (\$M)	Flow/AUM
1	ZSP BMO S&P 500 Index ETF	-\$1,186	-13%
2	HCA Hamilton Canadian Bank Mean Reversion Index ETF	-\$488	-88%
3	ZCPB BMO Core Plus Bond Fund ETF	-\$399	-25%
4	XSB iShares Core Canadian Short Term Bond Index ETF	-\$394	-14%
5	HXT Horizon S&P/TSX 60 Index ETF	-\$390	-10%
6	ZSP/U BMO S&P 500 Index ETF	-\$384	-15%
7	QEBL Mackenzie Emerging Markets Local Currency Bond	-\$368	-45%
8	ZCN BMO S&P/TSX Capped Composite Index ETF	-\$343	-5%
9	XIC iShares Core S&P/TSX Capped Composite Index ETF	-\$343	-4%
10	XIU iShares S&P/TSX 60 Index ETF	-\$308	-3%
11	FSF CI Global Financial Sector ETF	-\$300	-37%
12	BTCQ 3iQ Bitcoin ETF	-\$292	-112%
13	CBH iShares 1-10 Year Laddered Corporate Bond Index ETF	-\$258	-42%
14	XSP iShares Core S&P 500 Index ETF CAD- Hedged	-\$233	-3%
15	ZAG BMO Aggregate Bond Index ETF	-\$224	-3%
16	XUS iShares Core S&P 500 Index ETF	-\$200	-4%
17	ZST BMO Ultra Short-Term Bond ETF	-\$184	-22%
18	ZNQ BMO NASDAQ 100 Equity Index ETF	-\$183	-47%
19	ZFS BMO Short Federal Bond Index ETF	-\$173	-15%
20	TEC TD Global Technology Leaders Index ETF	-\$171	-15%

Source: National Bank of Canada, Bloomberg

Table 14 - ETF Flows by Category - May YTD 2023

Asset Class	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Equity	\$208,353	61%	\$4,716	2%
Fixed Income	\$106,217	31%	\$9,232	9%
Commodities	\$1,687	0%	-\$43	-3%
Multi-Asset	\$17,310	5%	\$1,163	7%
Inverse / Leveraged	\$3,389	1%	\$539	18%
Crypto-Asset	\$2,251	1%	-\$302	-18%
Total	\$339,207	100%	\$15,306	4.5%

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

Table 17 - Equity ETF Flows by Focus - May YTD 2023

Focus	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Cap-weighted	\$120,398	58%	-\$684	-1%
Dividend / Income	\$22,573	11%	\$1,062	5%
Factor: Low Vol	\$7,859	4%	\$37	0.5%
Factor: Multi-factor	\$2,902	1%	-\$75	-3%
Factor: Fundamental	\$5,066	2%	-\$83	-2%
Sector	\$27,812	13%	\$1,387	5%
Thematic	\$14,699	7%	\$2,392	20%
ESG**	\$9,750	5%	\$1,311	16%
Other	\$7,044	3%	\$680	11%
Total	\$208,353	100%	\$4,716	2.2%

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

** Only includes ESG ETFs under Thematic category

Table 15 - Equity ETF Flows by Geography - May YTD 2023

Geography	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada	\$75,161	36%	\$1,651	2%
United States	\$71,423	34%	-\$1,592	-2%
DM: Broad	\$24,078	12%	\$1,805	7%
DM: Regional & Country	\$6,195	3%	\$391	6%
Emerging Markets	\$6,165	3%	\$1,089	18%
Global	\$25,331	12%	\$1,372	6%
Total	\$208,353	100%	\$4,716	2.2%

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

Table 18 - Fixed Income ETF Flows by Type - May YTD 2023

Type	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada Aggregate	\$30,097	28%	\$1,300	4%
Canada Government	\$12,742	12%	\$2,174	20%
Canada Corporate	\$13,468	13%	-\$44	0%
U.S. / North America	\$9,020	8%	\$972	9%
Foreign	\$10,602	10%	\$276	3%
Sub-Investment Grade	\$3,946	4%	\$34	1%
Preferred/Convertible	\$5,557	5%	-\$286	-5%
Money Market	\$20,785	20%	\$4,808	30%
Total	\$106,217	100%	\$9,232	8.8%

Source: National Bank of Canada, Bloomberg

Table 16 - Equity ETF Flows by Sector* - May YTD 2023

Sector	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Financials	\$10,307	37%	\$1,219	11%
Energy	\$3,218	12%	-\$41	-1%
Technology	\$3,081	11%	-\$196	-7%
Real Estate	\$2,921	11%	-\$72	-2%
Health Care	\$2,919	10%	\$268	9%
Utilities	\$2,521	9%	\$152	6%
Materials	\$2,209	8%	\$8	0%
Other	\$638	2%	\$49	10%
Total	\$27,812	100%	\$1,387	5%

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

Table 19 - Fixed Income ETF Flows by Maturity - May YTD 2023

Maturity	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Broad/Mixed	\$49,465	47%	\$2,839	6%
Ultra Short Term	\$4,078	4%	\$194	5%
Short Term	\$16,288	15%	-\$1,249	-7%
Mid Term	\$6,047	6%	\$224	3%
Long Term	\$7,116	7%	\$2,105	43%
Real Return	\$1,380	1%	-\$69	-5%
Target Maturity	\$1,056	1%	\$380	43%
Money Market	\$20,785	20%	\$4,808	30%
Total	\$106,217	100%	\$9,232	8.8%

Source: National Bank of Canada, Bloomberg

Tables continue on the next page

May 2023: Japan, Emerging Market, and the Evergreen Money Market ETFs

June 2, 2023

Table 20 - Canada listed ESG ETF Flows by Categories* - May 2023

Category	AUM (\$M)	AUM (%)	May 2023		May YTD 2023	
			Flow (\$M)	Flow/AUM	Flow (\$M)	Flow/AUM
Equity	\$10,808	83%	-\$24	-0.2%	\$1,233	13.3%
Broad - Canada	\$2,890	22%	\$8	0.3%	\$329	13.2%
Broad - U.S.	\$2,590	20%	-\$26	-1.0%	\$91	3.9%
Broad - DM	\$1,492	11%	\$8	0.5%	\$100	7.4%
Broad - EM	\$997	8%	\$39	4.0%	\$694	210.9%
Broad - Global	\$1,285	10%	\$1	0.1%	\$53	4.4%
Environment	\$1,033	8%	-\$39	-3.6%	-\$21	-2.1%
Clean Energy	\$295	2%	-\$14	-4.4%	-\$7	-2.3%
Social	\$151	1%	\$0	0.3%	-\$11	-7.3%
Infrastructure	\$75	1%	-\$1	-1.1%	\$6	8.0%
Commodities	\$13	0%	\$0	0.0%	\$1	10.2%
Multi-Asset	\$167	1%	\$1	0.7%	\$9	5.8%
Fixed Income	\$2,111	16%	\$191	9.8%	\$522	32.3%
Total Displayed	\$13,098	100%	\$168	1.3%	\$1,765	16.0%

Source: National Bank of Canada, Bloomberg

Table 21 - ETF Flows by Provider - May YTD 2023

Provider	New Methodology (adjusted for ETF-of-ETFs)				Unadjusted	
	AUM (\$M)	Mkt Shr (%)	May YTD 2023 Flow (\$M)	May YTD 2023 Flow/AUM	May YTD 2023 AUM (\$M)	May YTD 2023 Flow (\$M)
1 RBC iShares	\$94,751	27.9%	\$946	1%	\$100,980	\$1,145
2 BMO	\$82,953	24.5%	\$1,793	2%	\$92,171	\$2,438
3 Vanguard	\$43,911	12.9%	\$1,333	3%	\$54,205	\$1,969
4 Horizons	\$24,868	7.3%	\$2,110	9%	\$25,684	\$2,252
5 CI GAM	\$18,377	5.4%	\$2,072	13%	\$18,605	\$2,125
6 Mackenzie*	\$12,606	3.7%	-\$7	0%	\$12,868	\$14
7 TDAM	\$9,909	2.9%	\$1,393	17%	\$10,021	\$1,413
8 NBI	\$9,157	2.7%	\$2,700	42%	\$9,157	\$2,700
9 Purpose	\$7,428	2.2%	\$347	5%	\$7,671	\$361
10 Invesco	\$5,204	1.5%	\$409	9%	\$5,222	\$406
11 Fidelity	\$3,533	1.0%	\$439	13%	\$3,902	\$547
12 Evolve Funds	\$2,817	0.8%	\$592	27%	\$2,870	\$587
13 Harvest	\$2,627	0.8%	\$247	9%	\$3,279	\$418
14 CIBC	\$2,625	0.8%	\$83	3%	\$2,639	\$84
15 Manulife	\$2,607	0.8%	\$164	7%	\$2,607	\$164
16 Dynamic	\$2,283	0.7%	\$44	2%	\$2,283	\$44
17 PIMCO	\$2,150	0.6%	\$69	3%	\$2,150	\$69
18 Hamilton	\$2,013	0.6%	\$617	34%	\$2,409	\$661
19 Desjardins	\$1,836	0.5%	\$184	11%	\$1,836	\$184
20 Scotia Bank	\$1,323	0.4%	-\$4	0%	\$1,323	-\$4
21 Franklin Templeton	\$1,258	0.4%	-\$110	-8%	\$1,258	-\$110
22 AGF	\$1,159	0.3%	\$2	0%	\$1,159	\$2
23 Picton Mahoney	\$655	0.2%	\$77	13%	\$655	\$77
24 Ninepoint Partners	\$589	0.2%	\$32	5%	\$589	\$32
25 Brompton Funds	\$467	0.1%	\$30	6%	\$564	\$55
26 Middlefield	\$463	0.1%	\$21	5%	\$463	\$21
27 First Trust	\$367	0.1%	-\$11	-3%	\$368	-\$10
28 Bristol Gate	\$357	0.1%	\$48	16%	\$357	\$48
29 Guardian Capital	\$219	0.1%	-\$18	-8%	\$219	-\$18
30 Emerge	\$119	0.0%	-\$6	-6%	\$119	-\$6
31 3iQ	\$104	0.0%	-\$291	-105%	\$104	-\$291
32 IA Clarington	\$104	0.0%	-\$11	-10%	\$104	-\$11
33 Lysander	\$80	0.0%	\$1	1%	\$80	\$1
34 Mulvihill	\$71	0.0%	\$17	NA	\$71	\$17
35 Russell Investments	\$69	0.0%	\$18	34%	\$69	\$18
36 Accelerate	\$59	0.0%	-\$4	-7%	\$64	-\$4
37 Arrow Capital	\$46	0.0%	\$7	18%	\$46	\$7
38 Starlight	\$24	0.0%	\$0	-1%	\$24	\$0
39 SmartBe	\$14	0.0%	-\$8	-34%	\$14	-\$8
40 Caldwell	\$5	0.0%	\$0	0%	\$5	\$0
41 NCM Investments	\$0.1	0.0%	-\$5	-99%	\$0.1	-\$5
Total	\$339,207	100.0%	\$15,320	4.5%	\$368,214	\$17,391

*Includes Wealthsimple asset and flows. Source: NBF, Bloomberg
Evermore is no longer in the provider table but contributed to \$11 million outflows in April.

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 2022 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.

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