

ETF Research & Strategy

July 5, 2023

June 2023: a divided risk appetite

- \$4.4 billion flowed into Canadian ETFs in June, amounting to \$19.6 billion year-to-date
- Risk appetite seems to be shifting as investors have been buying stocks and bonds in equal measure this year
- Crypto-asset ETFs in Canada saw a mild demand surge on news of BlackRock's spot bitcoin filing in the U.S.
- BMO launched eight new ETFs, Brompton launched a split share ETF and Hamilton launched a Utilities ETF

Summary: After a year of lagging demand for stocks, flows into Equity ETFs are finally catching up to Fixed Income in June; both asset classes had approximately \$1.8 billion in net flows. Crypto-Asset ETFs made a small comeback following the news that BlackRock filed for a spot bitcoin ETF in the U.S., joining dozens of other firms that have made similar attempts over the past 10 years. This spurred a wave of speculation that the SEC might approve a spot bitcoin ETF in the U.S. (Note: futuresbased bitcoin ETFs are available in the U.S. and spot bitcoin ETFs have been listed in Canada since 2021). Commodities had minor inflows of \$3 million. At the halfyear mark for 2023, Canadian ETFs have accumulated net inflows of \$19.7 billion, 16% higher than last year, and the breakdown in asset classes shows a more diversified division between stocks and bonds (Chart 2). We now observe a shared appetite for both equities and fixed income, and this reflects the new economic reality after a year of aggressive rate increases by the central banks in efforts to clamp down inflation.

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

Equity ETFs pulled in \$1.8 billion overall, despite outflows from international ETFs. Broad developed market and regional developed market (e.g., ZEQ) both saw redemptions, led by BMO's suite of products. Emerging markets region enjoyed the largest inflow at \$805 million among all regions due to several institutional-sized creation in an iShares ESG ETF, XSEM. If not for XSEM, emerging market ETFs would have had outflows of \$133 million. Canada welcomed inflows of \$755 million, led by XIU and ZEB. Several sectors lost assets while Financials (ZEB), Energy and Technology (TEC) enjoyed large inflows. Looking at factors,

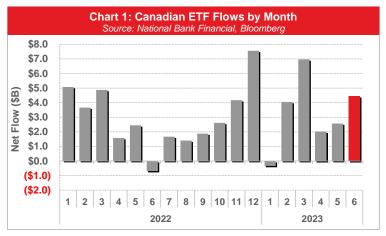
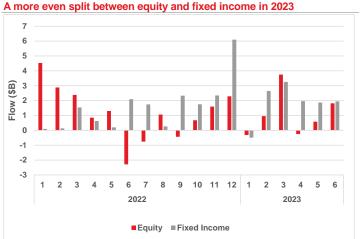


Table 1 - ETF Flows by Category - June YTD 2023							
	AUM	Mkt Shr	June 2023		June YTD 2023		
	(\$M)	(%)	Flow \$M	Flow/AUM	Flow \$M	Flow/AUM	
Equity	\$216,838		\$1,812	0.9%	\$6,521	3.1%	
Canada	\$77,811	22%	\$755	1.0%	\$2,405	3.1%	
United States	\$74,491	21%	\$72	0.1%	-\$1,521	-2.1%	
International	\$64,536	18%	\$986	1.6%	\$5,638	9.2%	
Fixed Income	\$107,926	31%	\$1,948	1.8%	\$11,181	10.7%	
Commodities	\$1,638	0%	\$3	0.2%	-\$40	-2.4%	
Multi-Asset	\$17,706	5%	\$163	0.9%	\$1,322	8.4%	
Inverse / Levered	\$3,536	1%	\$92	2.7%	\$634	21.1%	
Crypto-Asset	\$2,722	1%	\$337	15.0%	\$35	2.1%	
Total	\$350,367	100%	\$4,357	1.3%	\$19,653	5.8%	

*Equity Flows include option strategies;

Source: National Bank of Canada, Bloomberg

Chart 2: ETF Flows by Asset Class:



Source: NBF ETF Research, Bloomberg. Data as of June 30, 2023.

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Fundamental factor products (led by the quality-factor ETF **ZEQ**) suffered investor withdrawals of \$180 million, and low volatility factor ETFs, which have persisted with strong performance in 2023, also lost traction.

Fixed Income ETFs topped the inflow leaderboard again with \$1.9 billion created. Money market ETFs led the inflows again with \$792 million created in products such as CASH, CSAV, CBIL and UBIL/U. Canada aggregate bond (XBB, VAB), Canada government bond (ZGB) and foreign bond (NUBF) ranked in distant second, third and fourth places, respectively. Sub-investment grade bonds and preferred share ETFs continued to suffer redemptions.

Multi-asset ETFs had steady inflows of \$163 million. As major equity indices have started to recover with some like the S&P 500 Index reaching new 52-week highs, investors chose to shy away from market-neutral ETFs such as DANC. Crypto-Asset ETFs enjoyed a moment in the sun with bitcoin products such as BTCC/U leading creations. \$337 million went into this still-nascent asset class, the highest since May 2022.

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

The top 10 ETF issuers in Canada all had inflows in June except for Mackenzie, which suffered outflows from its index-tracking ETF QUU and actively managed bond ETF MFT. Inflows into crypto-asset ETFs certainly boosted the asset-gathering of ETF issuers such as Purpose, CI, Evolve and 3iQ. Hamilton continued to enjoy high percentage flows from its new covered call ETFs HMAX and UMAX.

New listing activity slowed down with summer: 10 ETFs were launched in June, bringing the total number of ETFs to 1,353.

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

Table 2 - ETF Flows by Provider - June 2023							
Table				r ETF-of-ETF	-s)	Unac	ljusted
	NOW INCUI	AUM	Mkt Shr		2023		2023
	Provider	(\$M)	(%)		Flow/AUM	AUM (\$M)	Flow (\$M)
1	RBC iShares	\$98,899	28.2%	\$1,585	2%	\$104,576	\$1,654
2	BMO	\$84,843	24.2%	\$713	1%	\$94,226	\$677
3	Vanguard	\$45,378	13.0%	\$379	1%	\$56,055	\$509
4	Horizons	\$25,583	7.3%	\$206	1%	\$26,303	\$220
5	CI GAM	\$18,937	5.4%	\$334	2%	\$19,094	\$338
6	Mackenzie*	\$12,634	3.6%	-\$119	-1%	\$12,898	-\$119
7	TDAM	\$10,093	2.9%	\$18	0%	\$10,213	\$23
8	NBI	\$9,573	2.7%	\$288	3%	\$9,573	\$288
9	Purpose	\$7,929	2.3%	\$346	5%	\$8,109	\$350
10	Invesco	\$5,355	1.5%	\$24	0%	\$5,372	\$24
11	Fidelity	\$3,741	1.1%	\$144	4%	\$4,159	\$176
12	Evolve Funds	\$2,954	0.8%	\$116	4%	\$3,007	\$113
13	Harvest	\$2,899	0.8%	\$37	1%	\$3,432	\$53
14	Manulife	\$2,654	0.8%	\$22	1%	\$2,654	\$22
15	CIBC	\$2,647	0.8%	\$4	0%	\$2,662	\$4
16	Dynamic	\$2,321	0.7%	\$16	1%	\$2,321	\$16
17	PIMCO	\$2,186	0.6%	\$25	1%	\$2,186	\$25
18	Hamilton	\$2,140	0.6%	\$128	6%	\$2,616	\$139
19	Desjardins	\$1,822	0.5%	-\$27	-1%	\$1,822	-\$27
20	Scotia Bank	\$1,344	0.4%	-\$3	0%	\$1,344	-\$3
21	Franklin Templeton	\$1,238	0.4%	-\$33	-3%	\$1,238	-\$33
22	AGF	\$1,194	0.3%	\$50	4%	\$1,194	\$50
23	Picton Mahoney	\$669	0.2%	\$10	2%	\$669	\$10
24	Ninepoint Partners	\$624	0.2%	-\$5	-1%	\$624	-\$5
25	Middlefield	\$538	0.2%	\$82	18%	\$538	\$82
26	Brompton Funds	\$483	0.1%	\$3	1%	\$582	\$4
27	First Trust	\$380	0.1%	\$2	0%	\$381	\$2
28	Bristol Gate	\$365	0.1%	-\$4	-1%	\$365	-\$4
29	Guardian Capital	\$219	0.1%	-\$1	0%	\$220	-\$1
30	3iQ	\$132	0.0%	\$23	22%	\$132	\$23
31	Emerge	\$126	0.0%	\$0	0%	\$126	\$0
32	IA Clarington	\$104	0.0%	\$0	0%	\$104	\$0
33	Lysander	\$80	0.0%	\$0	-1%	\$80	\$0
34	Mulvihill	\$75	0.0%	\$2	2%	\$75	\$2
35	Russell Investments	\$69	0.0%	\$0	0%	\$69	\$0
36	Accelerate	\$59	0.0%	\$0	-1%	\$64	\$0
37	Arrow Capital	\$46	0.0%	\$1	1%	\$46	\$1
38	Starlight	\$24	0.0%	\$0	-1%	\$24	\$0
39	SmartBe	\$7	0.0%	-\$8	-57%	\$7	-\$8
40	Caldwell	\$5	0.0%	\$0	7%	\$5	\$0
Tc	otal	\$350,367	100.0%	\$4,357	1.3%	\$379,162	\$4,603

*Includes Wealthsimple asset and flows. Source: NBF, Bloomberg. NCM is no longer in the provider table but contributed to the outflows.

Table	Table 3 - New Launches in June 2023					
	Ticker	Name	Fee (%)			
1	BGHC	BMO Global Health Care Fund	0.90			
2	BGIN	BMO Global Innovators Fund/ETF	0.95			
3	BGRT	BMO Global REIT Fund	0.90			
4	BGEQ	BMO Global Equity Fund	0.75			
5	BGIF	BMO Global Infrastructure Fund	1.05			
6	ZUVE	BMO US Equity Value MFR Fund	0.45			
7	ZUGE	BMO US Equity Growth MFR Fund	0.45			
8	ZWQT	BMO Global Enhanced Income Fund	0.65			
9	SPLT	Brompton Split Corp Preferred Share ETF	0.50			
10	UMAX	Hamilton Utilities Yield Maximizer ETF	0.65			

Source: NBF ETF Research, Provider

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Tab	Table 4 - Top Single Long ETF Inflows - June 2023					
	Ticker	Name	Flow (\$M)	Flow/AUM		
1	XSEM	iShares ESG Aware MSCI Emerging Markets Index	\$939	136%		
2	VFV	Vanguard S&P 500 Index ETF	\$601	8%		
3	ZGB	BMO Government Bond Index ETF	\$398	79%		
4	XIU	iShares S&P/TSX 60 Index ETF	\$313	3%		
5	ZCN	BMO S&P/TSX Capped Composite Index ETF	\$248	4%		
6	NSCB	NBI Sustainable Canadian Bond ETF	\$213	26%		
7	CASH	Horizons High Interest Savings ETF	\$204	8%		
8	CSAV	CI High Interest Savings ETF	\$183	2%		
9	NUBF	NBI Unconstrained Fixed Income ETF	\$180	8%		
10	XBB	iShares Core Canadian Universe Bond Index ETF	\$171	4%		
11	BTCC/U	Purpose Bitcoin ETF	\$128	58%		
12	ZSP	BMO S&P 500 Index ETF	\$127	2%		
13	ZEB	BMO Equal Weight Banks Index ETF	\$106	3%		
14	CBIL	Horizons 0-3 Month T-Bill ETF	§ 95	46%		
15	XUS	iShares Core S&P 500 Index ETF	\$87	2%		
16	VAB	Vanguard Canadian Aggregate Bond Index ETF	\$83	3%		
17	MHCD	Middlefield Healthcare Dividend ETF	\$80	91%		
18	TEC	TD Global Technology Leaders Index ETF	■ \$80	6%		
19	UBIL/U	Horizons 0-3 Month US T-Bill ETF	\$79	55%		
20	MNY	Purpose Cash Management Fund	\$75	48%		

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Source: National Bank	of Canada,	Bloomberg;

Table 5 - Top Single Long ETF Outflows - June 2023					
	Ticker	Name	Flow (\$M)	Flow/AUM	
1	VSP	Vanguard S&P 500 Index ETF CAD-hedged	-\$471	-17%	
2	HXT	Horizon S&P/TSX 60 Index ETF	-\$184	-5%	
3	ZEQ	BMO MSCI Europe High Quality Hedged To CAD	-\$161	-18%	
4	ZEA	BMO MSCI EAFE Index ETF	-\$137	-2%	
5	TPU	TD US Equity Index ETF	-\$136	-9%	
6	XSP	iShares Core S&P 500 Index ETF CAD- Hedged	-\$136	-2%	
7	QUU	Mackenzie US Large Cap Equity Index ETF	-\$114	-5%	
8	HXQ	Horizons NASDAQ 100 Index ETF	-\$108	-19%	
9	NHYB	NBI High Yield Bond ETF	-\$107	-9%	
10	ZEM	BMO MSCI Emerging Markets Index ETF	-\$104	-7%	
11	XFN	iShares S&P/TSX Capped Financials Index ETF	-\$93	-7%	
12	ZDH	BMO International Dividend Hedged to CAD ETF	-\$69	-29%	
13	XSB	iShares Core Canadian Short Term Bond Index ETF	-\$64	-3%	
14	ZSP/U	BMO S&P 500 Index ETF	-\$52	-2%	
15	ZWU	BMO Covered Call Utilities ETF	-\$51		
16	DANC	Desjardins Alt Long/Short Equity Market Neutral ETF	-\$43		
17	CLG	iShares 1-10 Year Laddered Government Bond Index	-\$42		
18	VSB	Vanguard Canadian Short-Term Bond Index ETF	-\$40	-3%	
19	FSB	CI Enhanced Short Duration Bon	-\$37	-5%	
20	XUU	iShares Core S&P US Total Market Index ETF	-\$37	-2%	

Source: National Bank of Canada, Bloomberg;

Table 6 - ETF Flows by Category - June 2023						
Asset Class	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM		
Equity	\$216,838	62%	\$1,812	0.9%		
Fixed Income	\$107,926	31%	\$1,948	1.8%		
Commodities	\$1,638	0%	\$3	0.2%		
Multi-Asset	\$17,706	5%	\$163	0.9%		
Inverse / Levered	\$3,536	1%	\$92	2.7%		
Crypto-Asset	\$2,722	1%	\$337	15.0%		
Total	\$350,367	100%	\$4,357	1.3%		

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

Table 7 - Equity ETF Flows by Geography - June 2023						
Geography	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM		
Canada	\$77,811	36%	\$755	1.0%		
United States	\$74,491	34%	\$72	0.1%		
DM: Broad	\$24,570	11%	-\$152	-0.6%		
DM: Regional & Country	\$6,396	3%	-\$15	-0.2%		
Emerging Markets	\$7,226	3%	\$805	13.1%		
Global	\$26,345	12%	\$348	1.4%		
Total	\$216,838	100%	\$1,812	0.9%		

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

Table 8 - Equity ETF Flows by Sector* - June 2023						
Sector	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM		
Financials	\$10,833	38%	\$162	1.6%		
Energy	\$3,389	12%	\$80	2.5%		
Technology	\$3,325	12%	\$92	3.0%		
Health Care	\$3,080	11%	\$68	2.3%		
Real Estate	\$2,896	10%	-\$22	-0.8%		
Utilities	\$2,492	9%	-\$17	-0.7%		
Materials	\$2,118	7%	-\$27	-1.2%		
Other	\$671	2%	\$6	1.0%		
Total	\$28,804	100%	\$342	1.2%		

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

Table 9 - Equity ETF Flows by Focus - June 2023						
Focus	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM		
Cap-weighted	\$125,308	58%	\$287	0.2%		
Dividend / Income	\$23,382	11%	\$227	1.0%		
Factor: Low Vol	\$7,847	4%	-\$50	-0.6%		
Factor: Multi-factor	\$2,987	1%	\$24	0.8%		
Factor: Fundamental	\$5,020	2%	-\$180	-3.5%		
Sector	\$28,804	13%	\$342	1.2%		
Thematic	\$16,035	7%	\$962	6.5%		
ESG**	\$10,882	5%	\$881	9.0%		
Other	\$7,454	3%	\$200	2.8%		
Total	\$216,838	100%	\$1,812	0.9%		

*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 - June 2023						
Туре	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM		
Canada Aggregate	\$30,536	28%	\$516	1.7%		
Canada Government	\$13,175	12%	\$445	3.5%		
Canada Corporate	\$13,475	12%	\$38	0.3%		
U.S. / North America	\$8,927	8%	\$67	0.7%		
Foreign	\$10,862	10%	\$274	2.6%		
Sub-Investment Grade	\$3,814	4%	-\$142	-3.6%		
Preferred/Convertible	\$5,597	5%	-\$42	-0.8%		
Money Market	\$21,541	20%	\$792	3.8%		
Total	\$107,926	100%	\$1,948	1.8%		

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	So	urce: National	Bank of Canada	a, Bloomberg			
Table 11 - Fixed Income ETF Flows by Maturity - June 2023							
Maturity	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM			
Broad/Mixed	\$50,589	47%	\$1,178	2.4%			
Ultra Short Term	\$4,033	4%	-\$51	-1.3%			
Short Term	\$16,064	15%	-\$193	-1.2%			
Mid Term	\$5,926	5%	\$2	0.0%			
Long Term	\$7,238	7%	\$101	1.4%			
Real Return	\$1,349	1%	-\$14	-1.0%			
Target Maturity	\$1,186	1%	\$133	12.6%			
Money Market	\$21,541	20%	\$792	3.8%			
Total	\$107,926	100%	\$1,948	1.8%			

Source: National Bank of Canada, Bloomberg



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YTD June ETF Flows (Tables 12 - 21):

Canadian ETFs have taken in \$19.7 billion in the first half of 2023, led by fixed income at \$11 billion with equity in a distant second place at \$6.5 billion created. The total inflow number is 17% higher than that of last year, when drawdowns and volatility characterized stock and bond markets alike. As Chart 2 on page 1 shows, equity ETF flows were strong at the start of 2022, but the fixed income asset class, led by money market ETFs, stole their thunder as interest rates climbed higher throughout the year. Equity flow is now finally catching up with fixed income in June 2023; sentiment has started to improve following the stellar returns of U.S. large cap stocks, which broadened out to multiple sectors and some global regions.

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 driving by a single institutional allocation to NREA, NBI's Global Real Assets Income ETF. As for the ESG category, iShares XSEM has received multiple institutional sized creations totalling \$1.6 billion year-to-date, dominating the \$2 billion inflows into equity ESG ETFs.

All regions other than the U.S. have been enjoying inflows this year. Canada, broad developed market, emerging market and global regions each welcomed inflows of close to \$2 billion, whereas U.S. bled \$1.5 billion in outflows, led by ZSP, even as the S&P 500 Index returned 17% 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 in the neighborhood of 5%. Money market ETFs had inflows of \$5.6 billion year-to-date, or 35% relative to 2022 year-end assets, followed by Canada government bond ETFs at \$2.6 billion, then Canada aggregate bond ETFs at \$1.8 billion. It would seem that Fixed Income ETF users are taking a barbell approach to investing — ultra-short term and long-term ETFs had the largest inflows, whereas short-term ETFs have lost assets to outflows. The Canadian aggregate bond is the evergreen building block category.

ESG ETF flows year to date, Table 20: ESG ETF XSEM received an institutional-sized order of \$939 million in June. Outside XSEM, the inflows into ESG ETFs were muted last month.

Tabl	e 12 - To	pp ETF Inflows - June YTD 2023		
	Ticker	Name	Flow (\$M)	Flow/AUM
1	CSAV	CI High Interest Savings ETF	\$2,227	42%
2	XSEM	iShares ESG Aware MSCI Emerging Markets Index ETF	\$1,595	3762%
3	CASH	Horizons High Interest Savings ETF	\$1,343	93%
4	NREA	NBI Global Real Assets Income ETF	\$1,091	2389%
5	ZEA	BMO MSCI EAFE Index ETF	\$1,009	19%
6	ZFL	BMO Long Federal Bond Index ETF	\$909	46%
7	VFV	Vanguard S&P 500 Index ETF	\$878	13%
8	ZEB	BMO Equal Weight Banks Index ETF	\$876	28%
9	NSCB	NBI Sustainable Canadian Bond ETF	\$687	198%
10	HBB	Horizons Cdn Select Universe Bond ETF	\$687	24%
11	TDB	TD Canadian Aggregate Bond Index ETF	\$520	105%
12	HEB	Hamilton Canadian Bank Equal-Weight Index ETF	\$500	NA
13	HISA	High Interest Savings Account Fund	\$490	45%
14	TCLB	TD Canadian Long Term Federal Bond ETF	\$437	34%
15	NUBF	NBI Unconstrained Fixed Income ETF	\$427	21%
16	TTP	TD Canadian Equity Index ETF	\$418	43%
17	HMAX	Hamilton Canadian Financials Yield Maximizer Etf	\$413	NA
18	ZGB	BMO Government Bond Index ETF	\$401	79%
19	XEC	iShares Core MSCI Emerging Markets IMI Index ETF	\$383	43%
20	ZMU	BMO Mid-Term US IG Corporate Bond CAD Hedged	\$368	15%

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Tabl	e 13 - 10 Ticker	op ETF Outflows - June YTD 2023 Name	Flow (\$M)	Flow/AUM
1	ZSP	BMO S&P 500 Index ETF	-\$1.059	-11%
2	HXT	Horizon S&P/TSX 60 Index ETF	-\$574	-15%
3	HCA	Hamilton Canadian Bank Mean Reversion Index ETF	-\$48 <mark>8</mark>	-88%
4	XSB	iShares Core Canadian Short Term Bond Index ETF	-\$458	-16%
5	VSP	Vanguard S&P 500 Index ETF CAD-hedged	-\$45 <mark>5</mark>	-18%
6	ZSP/U	BMO S&P 500 Index ETF	-\$436	-17%
7	ZCPB	BMO Core Plus Bond Fund ETF	-\$393	-24%
8	XSP	iShares Core S&P 500 Index ETF CAD- Hedged	-\$369	-5%
9	QEBL	Mackenzie Emerging Markets Local Currency Bond	-\$364	-45%
10	XIC	iShares Core S&P/TSX Capped Composite Index ETF	-\$362	-4%
11	FSF	Cl Global Financial Sector ETF	-\$301	-38%
12	BTCQ	3iQ Bitcoin ETF	-\$272	-105%
13	CBH	iShares 1-10 Year Laddered Corporate Bond Index ETF	-\$263	-43%
14	ZST	BMO Ultra Short-Term Bond ETF	-\$210	-25%
15	ZAG	BMO Aggregate Bond Index ETF	-\$191	
16	ZFS	BMO Short Federal Bond Index ETF	-\$165	-14%
17	CLF	iShares 1-5 Year Laddered Government Bond Index ETF	-\$153	-22%
18	VSB	Vanguard Canadian Short-Term Bond Index ETF	-\$146	, .
19	DXG	Dynamic Active Global Dividend ETF	-\$135	-17%
20	MFT	Mackenzie Floating Rate Income ETF	-\$131	-18%

Source: National Bank of Canada, Bloomberg; Source: National Bank of Canada, Bloomberg

Tables continue on the next page





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Table 14 - ETF Flows by Category - June YTD 2023									
Asset Class	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM					
Equity	\$216,838	62%	\$6,521	3%					
Fixed Income	\$107,926	31%	\$11,181	11%					
Commodities	\$1,638	0%	-\$40	-2%					
Multi-Asset	\$17,706	5%	\$1,322	8%					
Inverse / Leveraged	\$3,536	1%	\$634	21%					
Crypto-Asset	\$2,722	1%	\$35	2%					
Total	\$350,367	100%	\$19,653	5.8%					

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

Table 15 - Equity ETF Flows by Geography - June YTD 2023								
Geography	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM				
Canada	\$77,811	36%	\$2,405	3%				
United States	\$74,491	34%	-\$1,521	-2%				
DM: Broad	\$24,570	11%	\$1,654	6%				
DM: Regional & Country	\$6,396	3%	\$377	6%				
Emerging Markets	\$7,226	3%	\$1,894	32%				
Global	\$26,345	12%	\$1,713	3 7%				
Total	\$216,838	100%	\$6,521	3.1%				

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

Table 16 - Equity ETF Flows by Sector* - June YTD 2023							
Sector	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM			
Financials	\$10,833	38%	\$1,381	12%			
Energy	\$3,394	12%	\$39	1%			
Technology	\$3,325	12%	-\$104	-4%			
Health Care	\$3,080	11%	\$339	12%			
Real Estate	\$2,896	10%	-\$94	-3%			
Utilities	\$2,492	9%	\$135	5%			
Materials	\$2,118	7%	-\$18	-1%			
Other	\$666	2%	\$55	11%			
Total	\$28,804	100%	\$1,733	6%			

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

Table 17 - Equity ETF FI	ows by Focus -	June YTD 20	23	
Focus	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Cap-weighted	\$125,308	58%	-\$397	0%
Dividend / Income	\$23,382	11%	\$1,289	5%
Factor: Low Vol	\$7,847	4%	-\$14	-0.2%
Factor: Multi-factor	\$2,987	1%	-\$52	-2%
Factor: Fundamental	\$5,020	2%	-\$263	-5%
Sector	\$28,804	13%	\$1,733	6%
Thematic	\$16,035	7%	\$3,344	28%
ESG**	\$10,882	5%	\$2,192	27%
Other	\$7,454	3%	\$881	14%
Total	\$216,838	100%	\$6,521	3.1%

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

** Only includes ESG ETFs under Thematic category

Table 18 - Fixed Income ETF Flows by Type - June YTD 2023								
Туре	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM				
Canada Aggregate	\$30,536	28%	\$1,816	6%				
Canada Government	\$13,175	12%	\$2,619	24%				
Canada Corporate	\$13,475	12%	-\$6	0%				
U.S. / North America	\$8,927	8%	\$1,040	9%				
Foreign	\$10,862	10%	\$550	5%				
Sub-Investment Grade	\$3,814	4%	-\$109	-2%				
Preferred/Convertible	\$5,597	5%	-\$329	-5%				
Money Market	\$21,541	20%	\$5,600	35%				
Total	\$107,926	100%	\$11,181	10.7%				

	Source: National Bank of Canada, Bloomberg						
Table 19 - Fixed Income ETF Flows by Maturity - June YTD 2023							
Maturity	AUM (\$M)	Mkt Shr	Flow (\$M) Flo	w/AUM			
Broad/Mixed	\$50,589	47%	\$4,017	8%			
Ultra Short Term	\$4,033	4%	\$143	4%			
Short Term	\$16,064	15%	-\$1,442	-8%			
Mid Term	\$5,926	5%	\$227	3%			
Long Term	\$7,238	7%	\$2,206	45%			
Real Return	\$1,349	1%	-\$83	-6%			
Target Maturity	\$1,186	1%	\$512	58%			
Money Market	\$21,541	20%	\$5,600	35%			
Total	\$107.926	100%	\$11,181	10.7%			

Source: National Bank of Canada, Bloomberg

Table 20 - Canada listed ESG ETF Flows by Categories* - June 2023							
			June	June 2023		June YTD 2023	
Category	AUM (\$M)	AUM (%)	Flow (\$M)	Flow/AUM	Flow (\$M)	Flow/AUM	
Equity	\$11,902	83%	\$833	7.7%	\$2,066	22.3%	
Broad - Canada	\$2,980	21%	\$0	0.0%	\$329	13.2%	
Broad - U.S.	\$2,662	18%	-\$18	-0.7%	\$72	3.1%	
Broad - DM	\$1,502	10%	-\$3	-0.2%	\$96	7.1%	
Broad - EM	\$1,920	13%	\$922	92.5%	\$1,616	491.1%	
Broad - Global	\$1,287	9%	-\$36	-2.8%	\$17	1.4%	
Environment	\$1,044	7%	-\$13	-1.2%	-\$34	-3.4%	
Clean Energy	\$279	2%	-\$15	-5.2%	-\$23	-7.1%	
Social	\$150	1%	-\$5	-3.3%	-\$16	-10.6%	
Infrastructure	\$78	1%	\$2	2.2%	\$8	10.1%	
Commodities	\$14	0%	\$0	0.0%	\$1	10.2%	
Multi-Asset	\$171	1%	\$2	1.3%	\$11	7.3%	
Fixed Income	\$2,303	16%	\$197	9.3%	\$719	44.5%	
Total Displayed	\$14,391	100%	\$1,032	7.9%	\$2,797	25.3%	

Source: National Bank of Canada, Bloomberg

Tables continue on the next page



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Та	Table 21 - ETF Flows by Provider - June YTD 2023							
ıa	New Methodology (adjusted for ETF-of-ETFs) Unadjusted							
	14CW MCHIO	AUM	Mkt Shr	June YTI		June YT		
	Provider	(\$M)	(%)	Flow (\$M) F		AUM (\$M)	Flow (\$M)	
1	RBC iShares	\$98,899	28.2%	\$2,531	3%	\$104,576	\$2,799	
2	BMO	\$84,843	24.2%	\$2,506	3%	\$94,226	\$3,115	
	Vanguard	\$45,378	13.0%	\$1,712	3%	\$56,055	\$2,478	
4	Horizons	\$25,583	7.3%	\$2,316	10%	\$26,303	\$2,472	
	CI GAM	\$18,937	5.4%	\$2,400	15%	\$19,094	\$2,457	
6	Mackenzie*	\$12,634	3.6%	-\$126	-1%	\$12,898		
7	TDAM	\$10,093	2.9%	\$1,411	18%	\$10,213	\$1,436	
8	NBI	\$9,573	2.7%	\$2,988	47%	\$9,573	\$2,988	
	Purpose	\$7,929	2.3%	\$693	10%	\$8,109	\$710	
_	Invesco	\$5,355	1.5%	\$433	9%	\$5,372	\$430	
	Fidelity	\$3,741	1.1%	\$585	18%	\$4,159	\$725	
	Evolve Funds	\$2,954	0.8%	\$708	32%	\$3,007	\$699	
	Harvest	\$2,899	0.8%	\$289	10%	\$3,432	\$478	
_	Manulife	\$2,654	0.8%	\$187	8%	\$2,654	\$187	
	CIBC	\$2,647	0.8%	\$87	4%	\$2,662	\$89	
	Dynamic	\$2,321	0.7%	\$60	3%	\$2,321	\$60	
	PIMCO	\$2,186	0.6%	\$94	5%	\$2,186	\$94	
	Hamilton	\$2,140	0.6%	\$746	41%	\$2,616	\$800	
	Desjardins	\$1,822	0.5%	\$157	10%	\$1,822	\$157	
	Scotia Bank	\$1,344	0.4%	-\$7	-1%	\$1,344	-\$7	
	Franklin Templeton	\$1,238	0.4%	-\$144	-11%	\$1,238		
	AGF	\$1,194	0.4%	\$52	4%	\$1,230	\$52	
	Picton Mahoney	\$669	0.3%	\$87	15%	\$669	\$32 \$87	
	Ninepoint Partners	\$624	0.2%	\$18	3%	\$624	\$18	
	Middlefield	\$538	0.2%	\$103	25%	\$538	\$103	
	Brompton Funds	\$483	0.2%	\$33	6%	\$582	\$103	
	First Trust	\$380	0.1%	-\$10	-3%	\$381	-\$9	
	Bristol Gate	\$365	0.1%	\$44	15%	\$365	\$44	
	Guardian Capital	\$219	0.1%	-\$18	-8%	\$220	-\$18	
	3iQ	\$132	0.1%	-\$268	-97%	\$132	-\$16 -\$268	
	Emerge	\$132	0.0%	-\$206 -\$6	-6%	\$132 <u> </u> \$126	-\$200 -\$6	
	IA Clarington	\$120	0.0%	-\$11	-10%	\$104	-\$0 -\$11	
	Lysander	\$104	0.0%	\$0	1%	\$104	-\$11 \$0	
	Mulvihill	\$80 \$75	0.0%	\$19	NA	\$80 \$75	\$0 \$19	
	Russell Investments	\$69	0.0%	\$19	34%	\$69	\$19 \$18	
	Accelerate	\$59	0.0%	-\$5	-7%	\$64	-\$5	
	Arrow Capital	\$46	0.0%	-\$3 \$8	19%	\$46	- 5 5 \$8	
	Starlight	\$24	0.0%	\$0	-2%	\$24	\$0 \$0	
	SmartBe	\$24 \$7	0.0%	-\$16	-2% -69%	\$24 \$7	-\$16	
	Caldwell	\$7 \$5	0.0%	-\$16 \$0	-69% 7%	\$7 \$5	-\$16 \$0	
40	Total	\$350,367	100.0%	\$19,673	5.8%	\$379,162	ş	
	ıvıaı	· ·				\$379,102 Source: NRF	· <i>'</i>	

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

Evermore and NCM are no longer in the provider table but contributed to the outflows.



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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 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.



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



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