

ETF Research & Strategy

April 4, 2023

# March 2023: Mini banking crisis, Mega ETF flows

- Nearly \$7 billion flowed into Canadian ETFs in March, with financials in the spotlight despite volatility
- Equity ETFs had \$3.7 billion in flows thanks to dividends and financials; low volatility had outflows
- Cash-like "high interest savings" ETFs continue to rake in money in with another \$854 million inflow
- Some ESG ETFs saw creations as the debate around the concept continues

Summary: With U.S. regional bank failures making headlines in March, a whopping \$7.0 billion flowed into Canadian ETFs; despite the volatility, assets poured into Canadian financial sector ETFs. An institutional creation in a real asset ETF also represented a large \$1 billion block of inflow. Fixed Income ETFs registered \$3.3 billion in flows, with long term bonds, aggregate bonds and money market categories in the lead. Crypto-Asset and Commodity ETFs lost traction despite favourable price moves in bitcoin and gold.

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

Equity ETFs welcomed inflows of \$3.7 billion in March, led by Canada, global regions and broad developed markets; however, U.S. equity ETFs saw redemptions of \$525 million. Financial sector ETFs alone attracted \$1.4 billion led by ZEB, XFN and ZUB. We noticed most of the flows for these ETFs came after March 8<sup>th</sup>, when news of Silicon Valley Bank's sudden collapse dominated headlines. We published a report highlighting ETFs to use to trade the situation (How to take a "bank shot" with ETFs). Canadian financials sector ETFs surged in demand as investors either sought buying opportunities or financial exposure with

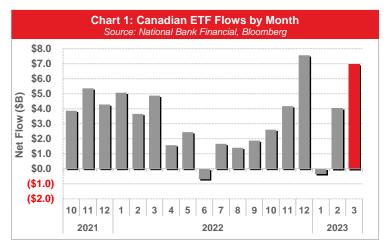


Table 1 - ETF Flows by Category - March YTD 2023							
	AUM	Mkt Shr	March	n 2023	March Y	TD 2023	
	(\$M)	(%)	Flow \$M	Flow/AUM	Flow \$M	Flow/AUM	
Equity	\$209,646		\$3,746	1.8%	\$4,372	2.0%	
Canada	\$77,255	23%	\$1,777	2.3%	\$1,844	2.4%	
United States	\$70,938	21%	-\$525	-0.8%	-\$799	-1.1%	
International	\$61,453	18%	\$2,495	4.3%	\$3,326	5.4%	
Fixed Income	\$103,455	31%	\$3,259	3.3%	\$5,409	5.2%	
Commodities	\$1,723	1%	-\$34	-2.1%	-\$24	-1.5%	
Multi-Asset	\$17,008	5%	\$170	1.0%	\$722	4.6%	
Inverse / Levered	\$3,353	1%	\$113	3.4%	\$439	14.6%	
Crypto-Asset	\$2,414	1%	-\$287	-12.1%	-\$234	-13.7%	
Total	\$337,599	100%	\$6,968	2.1%	\$10,683	3.1%	

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

minimal regional banks in the mix. NREA (NBI Global Real Assets Income ETF) received \$1 billion in one single block creation, the main driver behind the \$1.4 billion inflows into Thematic equity. ESG (NSCB, XSEM), Energy sector (XEG) and dividend/income also received new creations, while low volatility factor ETFs lost assets.

Fixed Income ETFs topped the inflow leaderboard with \$3.3 billion created. Canadian government bond ETFs accounted for \$1.2 billion of those flows, mostly into long-term government ETFs and broad government bond ETFs (ZFL, PGL, TCLB, ZTL/F, XGB). Canada aggregate bond ETFs (HBB, QBB) took in \$976 million. Money market or "cash like" ETFs had another month of strong inflows at \$854 million (CSAV, CASH). Investors stayed away from sub-investment grade bond and preferred share ETFs in March.

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Outflows from **crypto-asset** ETFs accelerated in March with \$287 million redeemed, led by **BTCQ**.

Commodity ETFs also had larger outflows in March (at \$34 million) compared to February, even as the gold prices climbed toward \$2,000 USD/oz.

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

Inflows were widespread across almost all ETF issuers with AGF and 3iQ suffering outflows. NCM investments also saw withdrawals as the ETF issuer announced a planned liquidation of its only ETF on the shelf, marking the provider's exit from the ETF market which will take place in May.

RBC iShares launched a suite of eight actively managed ETF series of existing mutual funds.

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

Tables continue on the next page

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New Methodology (adjusted for ETF-of-ETFs) AUM Mkt Shr March 2023						Unadj	
	Provider	AUM	Mkt Shr			March	
	DDO :01	(\$M)	(%)		Flow/AUM	AUM (\$M)	Flow (\$M)
1	RBC iShares	\$95,455	28.3%	\$1,178	1%	\$101,261	\$1,210
2	BMO	\$83,525	24.7%	\$1,533	2%	\$92,819	\$1,616
3	Vanguard	\$43,330	12.8%	\$349	1%	\$53,461	\$506
4	Horizons	\$24,279	7.2%	\$787	3%	\$25,017	\$841
5	CI GAM	\$18,043	5.3%	\$414	2%	\$18,262	\$422
6	Mackenzie*	\$12,625	3.7%	\$370	3%	\$12,890	\$376
7	TDAM	\$9,464	2.8%	\$133	1%	\$9,558	\$135
8	NBI	\$8,903	2.6%	\$1,502	20%	\$8,903	\$1,502
9	Purpose	\$7,107	2.1%	\$170	3%	\$7,378	\$171
10	Invesco	\$5,325	1.6%	\$415	8%	\$5,344	\$414
11	Fidelity	\$3,496	1.0%	\$117	3%	\$3,828	\$147
12	Harvest	\$2,677	0.8%	\$38	1%	\$3,217	\$66
13	Evolve Funds	\$2,652	0.8%	\$39	1%	\$2,706	\$36
14	CIBC	\$2,603	0.8%	\$33	1%	\$2,614	\$35
15	Manulife	\$2,475	0.7%	\$22	1%	\$2,475	\$22
16	Dynamic	\$2,324	0.7%	\$62	3%	\$2,324	\$62
17	PIMCO	\$2,138	0.6%	-\$9	0%	\$2,138	-\$9
18	Hamilton	\$1,857	0.6%	\$116	6%	\$2,245	\$136
19	Desjardins	\$1,613	0.5%	-\$3	0%	\$1,613	-\$3
20	Scotia Bank	\$1,330	0.4%	\$14	1%	\$1,330	\$14
21	Franklin Templeton	\$1,289	0.4%	\$9	1%	\$1,289	\$9
22	AGF	\$1,185	0.4%	-\$56	-5%	\$1,185	-\$56
23	Ninepoint Partners	\$654	0.2%	\$1	0%	\$654	\$1
24	Picton Mahoney	\$624	0.2%	\$22	4%	\$624	\$22
25	Brompton Funds	\$467	0.1%	\$2	0%	\$559	\$2
26	Middlefield	\$426	0.1%	-\$2	-1%	\$426	-\$2
27	First Trust	\$385	0.1%	\$4	1%	\$385	\$4
28	Bristol Gate	\$361	0.1%	\$5	2%	\$361	\$5
29	Guardian Capital	\$220	0.1%	\$0	0%	\$221	\$0
30	3iQ	\$163	0.0%	-\$297	-66%	\$163	-\$297
31	Emerge	\$118	0.0%	-\$2	-2%	\$118	-\$2
32	IA Clarington	\$106	0.0%	\$4	4%	\$106	\$4
33	Lysander	\$81	0.0%	-\$1	-1%	\$81	-\$1
34	Mulvihill	\$73	0.0%	\$2	2%	\$73	\$2
35	Russell Investments	\$67	0.0%	\$12	22%	\$67	\$12
36	Accelerate	\$59	0.0%	-\$1	-1%	\$66	\$0
37	Arrow Capital	\$43	0.0%	\$1	3%	\$43	\$1
38	Starlight	\$25	0.0%	\$0	1%	\$25	\$0
39	SmartBe	\$16	0.0%	-\$6	-25%	\$16	-\$6
40	Evermore Capital	\$12	0.0%	-\$3	-20%	\$12	-\$3
41	Caldwell	\$5	0.0%	\$0	0%	\$5	\$0
42	NCM Investments	\$0.1	0.0%	-\$5	-97%	\$0.1	-\$5
To	tal	\$337,599	100.0%	\$6,968	2.1%	\$365,861	\$7,392

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

Table 3 - New Launches in March 2023							
	Ticker	Name	Fee (%)				
1	RCEI	RBC Canadian Equity Income Fund – ETF Series	0.60				
2	RNAV	RBC North American Value Fund – ETF Series	0.60				
3	RNAG	RBC North American Growth Fund – ETF Series	0.60				
4	RINT	RBC International Equity Fund – ETF Series	0.75				
5	REMD	RBC Emerging Markets Dividend Fund – ETF Series	0.85				
6	RENG	RBC Global Energy Fund – ETF Series	0.75				
7	RGPM	RBC Global Precious Metals Fund – ETF Series	0.75				
8	RTEC	RBC Global Technology Fund – ETF Series	0.75				

Source: NBF, ETF provider.





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Tabl	e 4 - Top	Single Long ETF Inflows - March 2023		
	Ticker	Name	Flow (\$M)	Flow/AUM
1	NREA	NBI Global Real Assets Income ETF	\$1,068	2399%
2	ZEB	BMO Equal Weight Banks Index ETF	\$867	36%
3	ZEA	BMO MSCI EAFE Index ETF	\$595	11%
4	HBB	Horizons Cdn Select Universe Bond ETF	\$490	17%
5	ZFL	BMO Long Federal Bond Index ETF	\$405	19%
6	CSAV	CI High Interest Savings ETF	\$396	6%
7	QBB	Mackenzie Canadian Aggregate Bond Index ETF	\$259	45%
8	PGL	Invesco Long Term Government Bond Index ETF	\$224	245%
9	TCLB	TD Canadian Long Term Federal Bond ETF	\$221	16%
10	CASH	Horizons High Interest Savings ETF	\$217	11%
11	PFL	Invesco 1-3 Year Laddered Floating Rate Note	\$214	36%
12	NSCB	NBI Sustainable Canadian Bond ETF	\$206	48%
13	ZEM	BMO MSCI Emerging Markets Index ETF	\$168	11%
14	XFN	iShares S&P/TSX Capped Financials Index ETF	<b>\$166</b>	12%
15	XSEM	iShares ESG Aware MSCI Emerging Markets	<b>\$161</b>	358%
16	XGB	iShares Core CanadianGovernm	<b>\$161</b>	26%
17	XEG	iShares S&P/TSX Capped Energy Index ETF	125	7%
18	ZUB	BMO Equal Weight US Banks CAD-Hedged ETF	119	26%
19	ZTL/F	BMO Long-Term US Treasury Bond Index ETF	\$103	45%
20	NINT	NBI Active International Equity ETF	\$99	26%

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Source:	National R	ank of (	Canada	Rloomhera:

Tab	le 5 - Top	Single Long ETF Outflows - March 2023		
	Ticker	Name	Flow (\$M)	Flow/AUM
1	ZSP	BMO S&P 500 Index ETF	-\$424	-5%
2	ZSP/U	BMO S&P 500 Index ETF	-\$374	-14%
3	BTCQ	3iQ CoinShares Bitcoin ETF	-\$297	-70%
4	ZHY	BMO High Yield US Corporate Bond CAD-H	-\$18	-17%
5	TEC	TD Global Technology Leaders Index ETF	-\$166	-13%
6	ZFS	BMO Short Federal Bond Index ETF	-\$122	-11%
7	HXT	Horizon S&P/TSX 60 Index ETF	-\$108	-3%
8	XIU	iShares S&P/TSX 60 Index ETF	-\$97	-1%
9	VAB	Vanguard Canadian Aggregate Bond Index ETF	-\$65	-2%
10	ZLU	BMO Low Volatility US Equity ETF	-\$64	-4%
11	XSH	iShares Core Canadian Short Term Corporate Bond	-\$62	-5%
12	ZIC	BMO Mid-Term US IG Corporate Bond Index ETF	-\$61	-45%
13	HSUV/U	Horizons USD Cash Maximizer ETF	-\$60	-5%
14	QBTL	AGF US Market Neutral Anti-Bet	-\$55	-14%
15	ESGY	BMO MSCI USA ESG Leaders Index ETF	-\$54	-3%
16	ZMP	BMO Mid Provincial Bond Index ETF	-\$46	-15%
17	XEH	iShares MSCI Europe IMI Index ETF CAD-Hedged	-\$41	-23%
18	ZNQ	BMO NASDAQ 100 Equity Index ETF	-\$40	-9%
19	CGXF	CI Gold+ Giants Covered Call ETF	-\$40	-21%
20	VSB	Vanguard Canadian Short-Term Bond Index ETF	-\$40	-3%

Source: National Bank of Canada, Bloomberg;

Table 6 - ETF Flows by Category - March 2023							
Asset Class	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM			
Equity	\$209,646	62%	\$3,746	1.8%			
Fixed Income	\$103,455	31%	\$3,259	3.3%			
Commodities	\$1,723	1%	-\$34	-2.1%			
Multi-Asset	\$17,008	5%	\$170	1.0%			
Inverse / Levered	\$3,353	1%	\$113	3.4%			
Crypto-Asset	\$2,414	1%	-\$287	-12.1%			
Total	\$337,599	100%	\$6,968	2.1%			

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

Table 7 - Equity ETF Flows by Geography - March 2023						
Geography	AUM (\$M)	Mkt Shr	Flo	w (\$M)	Flow/AUM	
Canada	\$77,255	37%		\$1,777	2.3%	
United States	\$70,938	34%		-\$525	-0.8%	
DM: Broad	\$23,914	11%		\$829	3.6%	
DM: Regional & Country	\$5,944	3%		\$81	1.4%	
Emerging Markets	\$6,007	3%		\$370	6.7%	
Global	\$25,587	12%		\$1,216	5.1%	
Total	\$209,646	100%		\$3,746	1.8%	

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

Table 8 - Equity ETF F	lows by Sector* -	March 2023	3	
Sector	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Financials	\$10,519	37%	\$1,356	13.4%
Energy	\$3,426	12%	\$99	2.8%
Real Estate	\$3,170	11%	\$44	1.3%
Health Care	\$2,956	10%	\$81	2.9%
Technology	\$2,873	10%	-\$119	-4.4%
Utilities	\$2,527	9%	\$62	2.6%
Materials	\$2,447	9%	-\$5	-0.2%
Other	\$660	2%	\$50	9.8%
Total	\$28,577	100%	\$1,567	5.7%

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

Table 9 - Equity ETF Flows by Focus - March 2023							
Focus	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM			
Cap-weighted	\$121,099	58%	\$257	0.2%			
Dividend / Income	\$22,724	11%	\$416	1.9%			
Factor: Low Vol	\$7,924	4%	-\$91	-1.1%			
Factor: Multi-factor	\$2,937	1%	\$33	1.2%			
Factor: Fundamental	\$5,149	2%	\$8	0.2%			
Sector	\$28,577	14%	\$1,567	5.7%			
Thematic	\$14,341	7%	\$1,381	10.8%			
ESG**	\$9,251	4%	\$272	3.1%			
Other	\$6,894	3%	\$174	2.6%			
Total	\$209,646	100%	\$3,746	1.8%			

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

\*\* Only includes ESG ETFs under Thematic category

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Table 10 - Fixed Income ETF Flows by Type - March 2023						
Type	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM		
Canada Aggregate	\$29,780	29%	\$976	3.4%		
Canada Government	\$12,328	12%	\$1,176	10.7%		
Canada Corporate	\$13,363	13%	\$224	1.7%		
U.S. / North America	\$8,721	8%	\$117	1.4%		
Foreign	\$10,382	10%	\$99	1.0%		
Sub-Investment Grade	\$4,177	4%	-\$107	-2.5%		
Preferred/Convertible	\$5,963	6%	-\$79	-1.2%		
Money Market	\$18,741	18%	\$854	4.8%		
Total	\$103.455	100%	\$3 259	3 3%		

Source:	National	Bank	of Canada.	Bloomberg

Table 11 - Fixed Income ETF Flows by Maturity - March 2023								
Maturity	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM				
Broad/Mixed	\$49,253	48%	\$1,311	2.8%				
Ultra Short Term	\$4,099	4%	\$296	7.7%				
Short Term	\$16,642	16%	-\$266	-1.6%				
Mid Term	\$5,837	6%	-\$33	-0.6%				
Long Term	\$6,555	6%	\$1,013	18.9%				
Real Return	\$1,410	1%	-\$9	-0.7%				
Target Maturity	\$918	1%	\$93	11.3%				
Money Market	\$18,741	18%	\$854	4.8%				
Total	\$103,455	100%	\$3,259	3.3%				

Source: National Bank of Canada, Bloomberg



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## YTD March ETF Flows (Table 12 - 21):

Canadian ETFs have taken in \$10.7 billion YTD, led by fixed income at \$5.4 billion and equity at \$4.4 billion. Commodities and Crypto-Asset ETFs lost assets; a surprising outcome given recovering performance so far in 2023. Within equities, dividend/income, sector (Financials, Health Care), ESG and other categories (mostly equity asset allocation ETFs) welcomed the lion's share of equity inflows. Canada, broad developed market and global regions were favoured while U.S. equities suffered redemptions. As for fixed income, the enthusiasm for money market seems unstoppable, especially now that ETFs in this category are yielding close to 5%. Money market ETFs had inflows of \$2.8 billion YTD, followed by Canada government bond ETFs at \$1.5 billion and Canada aggregate bond ETF at \$702 million, whereas Canada corporate bond and preferred share ETFs were on the outs.

Table	Table 12 - Top ETF Inflows - March YTD 2023								
	Ticker	Name	Flow (\$M)	Flow/AUM					
1	CSAV	CI High Interest Savings ETF	\$1,533	29%					
2	NREA	NBI Global Real Assets Income ETF	\$1,066	2333%					
3	ZEA	BMO MSCI EAFE Index ETF	\$992	18%					
4	CASH	Horizons High Interest Savings ETF	\$808	56%					
5	ZEB	BMO Equal Weight Banks Index ETF	\$641	21%					
6	HBB	Horizons Cdn Select Universe Bond ETF	\$598	21%					
7	ZFL	BMO Long Federal Bond Index ETF	\$517	26%					
8	TDB	TD Canadian Aggregate Bond Index ETF	\$487	99%					
9	PFL	Invesco 1-3 Year Laddered Floating Rate Note	\$407	101%					
10	TCLB	TD Canadian Long Term Federal Bond ETF	\$339	26%					
11	HISA	High Interest Savings Account Fund	\$287	27%					
12	NSCB	NBI Sustainable Canadian Bond ETF	\$282	81%					
13	QBB	Mackenzie Canadian Aggregate Bond Index ETF	\$271	47%					
14	ZHY	BMO High Yield US Corporate Bond CAD hedged	\$266	41%					
15	CRED	CI Alternative Investment Grade Credit Fund	\$249	632%					
16	XGB	iShares Core CanadianGovernm	\$244	41%					
17	NINT	NBI Active International Equity ETF	\$225	91%					
18	TTP	TD Canadian Equity Index ETF	\$224	23%					
19	HNU	BetaPro Natural Gas Leveraged Daily Bull ETF	\$221	210%					
20	HMAX	Hamilton Canadian Financials Yield Maximizer Etf	\$212	NA					

Tabl	le 13 - To	pp ETF Outflows - March YTD 2023		
	Ticker	Name Name	Flow (\$M)	Flow/AUM
1	ZSP	BMO S&P 500 Index ETF	-\$750	-8%
2	QEBL	Mackenzie Emerging Markets Local Currency Bond	-\$4 <mark>12</mark>	-51%
3	ZAG	BMO Aggregate Bond Index ETF	-\$3 <mark>99</mark>	-6%
4	ZSP/U	BMO S&P 500 Index ETF	-\$3 <mark>8</mark> 1	-15%
5	XSB	iShares Core Canadian Short Term Bond Index ETF	-\$35 <mark>6</mark>	-13%
6	HXT	Horizon S&P/TSX 60 Index ETF	-\$329	-9%
7	PSA	Purpose High Interest Savings Fund	-\$314	-8%
8	CBH	iShares 1-10 Year Laddered Corporate Bond	-\$274	-45%
9	XIC	iShares Core S&P/TSX Capped Composite Index ETF	-\$254	-3%
10	ZST	BMO Ultra Short-Term Bond ETF	-\$241	-29%
11	BTCQ	3iQ CoinShares Bitcoin ETF	-\$239	-92%
12	ZCPB	BMO Core Plus Bond Fund ETF	-\$209	-13%
13	TEC	TD Global Technology Leaders Index ETF	-\$168	-14%
14	ZFS	BMO Short Federal Bond Index ETF	-\$151	-13%
15	HND	BetaPro Natural Gas Inverse Le	-\$133	-149%
16	MGB	Mackenzie Core Plus Global Fixed Income ETF	-\$131	-56%
17	XBB	iShares Core Canadian Universe Bond Index ETF	-\$128	-3%
18	CLF	iShares 1-5 Year Laddered Government Bond	-\$123	-18%
19	XSP	iShares Core S&P 500 Index ETF CAD- Hedged	-\$116	-2%
20	VSB	Vanguard Canadian Short-Term Bond Index ETF	-\$113	-8%

Source: National Bank of Canada, Bloomberg;

Source: National Bank of Canada, Bloomberg

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Table 14 - ETF Flows by Category - March YTD 2023									
Asset Class	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM					
Equity	\$209,646	62%	\$4,372	2%					
Fixed Income	\$103,455	31%	\$5,409	5%					
Commodities	\$1,723	1%	-\$24	-1%					
Multi-Asset	\$17,008	5%	\$722	5%					
Inverse / Leveraged	\$3,353	1%	\$439	15%					
Crypto-Asset	\$2,414	1%	-\$234	-14%					
Total	\$337,599	100%	\$10,683	3.1%					

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

Table 15 - Equity ETF Flows by Geography - March YTD 2023								
Geography	AUM (\$M)	Mkt Shr	Flov	v (\$M)	Flow/AUM			
Canada	\$77,255	37%	1	\$1,844	2%			
United States	\$70,938	34%		-\$799	-1%			
DM: Broad	\$23,914	11%		\$1,438	6%			
DM: Regional & Country	\$5,944	3%		\$108	2%			
Emerging Markets	\$6,007	3%		\$379	6%			
Global	\$25,587	12%		\$1,401	6%			
Total	\$209,646	100%		\$4,372	2.0%			

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

Table 16 - Equity ETF F	lows by Sector* -	March YTD	2023	
Sector	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Financials	\$10,519	37%	\$1,102	10%
Energy	\$3,431	12%	\$30	1%
Real Estate	\$3,170	11%	\$59	2%
Health Care	\$2,956	10%	\$230	8%
Technology	\$2,873	10%	-\$169	-6%
Utilities	\$2,527	9%	\$79	3%
Materials	\$2,447	9%	\$121	6%
Other	\$655	2%	\$50	10%
Total	\$28,577	100%	\$1,502	5%

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

Table 17 - Equity ETF Flows by Focus - March YTD 2023									
Focus	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM					
Cap-weighted	\$121,099	58%	-\$42	0%					
Dividend / Income	\$22,724	11%	\$709	3%					
Factor: Low Vol	\$7,924	4%	-\$22	0%					
Factor: Multi-factor	\$2,937	1%	-\$79	-3%					
Factor: Fundamental	\$5,149	2%	-\$30	-1%					
Sector	\$28,577	14%	\$1,502	5%					
Thematic	\$14,341	7%	\$1,847	15%					
ESG**	\$9,251	4%	\$767	9%					
Other	\$6,894	3%	\$487	8%					
Total	\$209,646	100%	\$4,372	2.0%					

\*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 - March YTD 2023								
Туре	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM				
Canada Aggregate	\$29,780	29%	\$702	2%				
Canada Government	\$12,328	12%	\$1,509	14%				
Canada Corporate	\$13,363	13%	-\$227	-2%				
U.S. / North America	\$8,721	8%	\$584	5%				
Foreign	\$10,382	10%	-\$26	0%				
Sub-Investment Grade	\$4,177	4%	\$225	5%				
Preferred/Convertible	\$5,963	6%	-\$118	-2%				
Money Market	\$18,741	18%	\$2,761	17%				
Total	\$103,455	100%	\$5,409	5.2%				

Total	φ100,100	10070	ψ0, 100	0.270		
	Source: National Bank of Canada, Bloom					
Table 19 - Fixed Incom	e ETF Flows by Ma	aturity - Marc	h YTD 2023			
Maturity AUM (\$M) Mkt Shr Flow (\$M) Flow/						
Broad/Mixed	\$49,253	48%	\$2,020	4%		
Ultra Short Term	\$4,099	4%	\$208	5%		
Short Term	\$16,642	16%	-\$1,087	-6%		
Mid Term	\$5,837	6%	-\$58	-1%		
Long Term	\$6,555	6%	\$1,418	29%		
Real Return	\$1,410	1%	-\$51	-3%		
Target Maturity	\$918	1%	\$199	22%		
Money Market	\$18,741	18%	\$2,761	17%		
Total	\$103,455	100%	\$5,409	5.2%		

Source: National Bank of Canada, Bloomberg

Table 20 - Canada listed ESG ETF Flows by Categories* - March 2023								
			March 2023		2023	March YTD		TD 2023
Category	AUM (\$M) A	UM (%)	FI	ow (\$M) F	low/AUM	FI	ow (\$M)	Flow/AUM
Equity	\$10,358	83%		\$260	2.6%		\$725	7.8%
Broad - Canada	\$2,843	23%		\$86	3.1%		\$259	10.4%
Broad - U.S.	\$2,554	20%		-\$67	-2.6%		\$109	4.6%
Broad - DM	\$1,504	12%		\$11	0.7%	ı	\$91	6.7%
Broad - EM	\$610	5%		\$247	70.5%		\$276	83.8%
Broad - Global	\$1,305	10%	-	-\$5	-0.4%	ı	\$63	5.3%
Environment	\$982	8%	ı	-\$14	-1.4%		-\$79	-7.8%
Clean Energy	\$329	3%	-	\$2	0.6%	۱	\$8	2.5%
Social	\$154	1%	1	-\$4	-2.3%	ı	-\$8	-5.1%
Infrastructure	\$79	1%		\$2	2.8%	۱	\$7	9.5%
Commodities	\$15	0%		\$0	-1.5%		\$1	10.2%
Multi-Asset	\$165	1%		\$1	0.5%	1	\$8	5.1%
Fixed Income	\$1,947	16%		\$239	14.2%		\$338	20.9%
Total Displayed	\$12,485	100%		\$500	4.2%		\$1,072	9.7%

Source: National Bank of Canada, Bloomberg

Tables continue on the next page



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Ta	Table 21 - ETF Flows by Provider - March YTD 2023								
	New Meth	Unadju	usted						
	Provider	AUM	Mkt Shr	March Y		March Y	TD 2023		
	Provider	(\$M)	(%)	Flow (\$M)	Flow/AUM	AUM (\$M)	Flow (\$M)		
1	RBC iShares	\$95,455	28.3%	\$353	0%	\$101,261	\$479		
2	BMO	\$83,525	24.7%	\$1,485	2%	\$92,819	\$2,099		
3	Vanguard	\$43,330	12.8%	\$729	1%	\$53,461	\$1,143		
4	Horizons	\$24,279	7.2%	\$1,394	6%	\$25,017	\$1,485		
5	CI GAM	\$18,043	5.3%	\$1,675	10%	\$18,262	\$1,722		
6	Mackenzie*	\$12,625	3.7%	-\$45	0%	\$12,890	-\$38		
7	TDAM	\$9,464	2.8%	\$985	12%	\$9,558	\$990		
8	NBI	\$8,903	2.6%	\$2,313	36%	\$8,903	\$2,313		
9	Purpose	\$7,107	2.1%	-\$4	0%	\$7,378	\$5		
10	Invesco	\$5,325	1.6%	\$520	11%	\$5,344	\$518		
11	Fidelity	\$3,496	1.0%	\$351	11%	\$3,828	\$417		
12	Harvest	\$2,677	0.8%	\$191	7%	\$3,217	\$317		
	Evolve Funds	\$2,652	0.8%	\$416	19%	\$2,706	\$412		
	CIBC	\$2,603	0.8%	\$53	2%	\$2,614	\$55		
15	Manulife	\$2,475	0.7%	-\$18	-1%	\$2,475	-\$18		
	Dynamic	\$2,324	0.7%	\$41	2%	\$2,324	\$41		
	PIMCO	\$2,138	0.6%	\$44	2%	\$2,138	\$44		
	Hamilton	\$1,857	0.6%	\$413	23%	\$2,245	\$427		
19	Desjardins	\$1,613	0.5%	-\$49	-3%	\$1,613	-\$49		
_	Scotia Bank	\$1,330	0.4%	\$11	1%	\$1,330	\$11		
	Franklin Templeton	\$1,289	0.4%	-\$81	-6%	\$1,289	-\$81		
	AGF	\$1,185	0.4%	\$14	1%	\$1,185	\$14		
	Ninepoint Partners	\$654	0.2%	\$21	3%	\$654	\$21		
	Picton Mahoney	\$624	0.2%	\$50	9%	\$624	\$50		
	Brompton Funds	\$467	0.1%	\$30	6%	\$559	\$49		
_	Middlefield	\$426	0.1%	-\$3	-1%	\$426	-\$3		
	First Trust	\$385	0.1%	\$3	1%	\$385	\$3		
_	Bristol Gate	\$361	0.1%	\$49	17%	\$361	\$49		
	Guardian Capital	\$220	0.1%	-\$20	-9%	\$221	-\$20		
	3iQ	\$163	0.0%	-\$237	-86%	\$163	-\$237		
	Emerge	\$118	0.0%	-\$6	-6%	\$118	-\$6		
	IA Clarington	\$106	0.0%	-\$9	-8%	\$106	-\$9		
	Lysander	\$81	0.0%	-\$2	-3%	\$81	-\$2		
	Mulvihill	\$73	0.0%	\$15	NA 2007	\$73	\$15		
	Russell Investments	\$67	0.0%	\$14	28%	\$67	\$14		
_	Accelerate	\$59	0.0%	-\$3	-5%	\$66	-\$2		
	Arrow Capital	\$43	0.0%	\$4	10%	\$43	\$4		
	Starlight	\$25	0.0%	\$0	0%	\$25	\$0 \$0		
	SmartBe	\$16	0.0%	-\$6	-28% NA	\$16	-\$6		
	Evermore Capital	\$12	0.0%	-\$3		\$12	-\$3		
	Caldwell	\$5 ************************************	0.0%	\$0	0%	\$5 *0.4	\$0 \$F		
42	NCM Investments Total	\$0.1	0.0%	-\$5	-99% <b>3.1%</b>	\$0.1	-\$5		
	ıvidi	\$337,599	100.0%	\$10,683	J. 1%	\$365,861	\$12,217		

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



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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 2021 annual fee for managing and administering the fund, expressed as a percentage of total fund value. In most cases, this includes fees from investing in other ETFs. Where audited MER is unavailable or if the fee has recently been significantly reduced, 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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