

July 2019: Largest Fixed Income ETF Inflow in the Past Two Years

- Canadian ETFs attracted \$1.8 billion new money in July; year-to-date ETF flows reached \$12.2 billion
- Fixed Income ETFs dominated, with demand spread among all categories except Canadian corporates
- July saw some new launches in the “alternative” space, bringing the category’s YTD flow to \$160 million
- Seventeen ETFs launched, many from new ETF providers Picton Mahoney and Emerge

Summary: After a flat month of inflows in June, ETFs in Canada gathered \$1.8 billion in July, bringing the total assets to \$184 billion dollars. Fixed Income ETFs made up \$1.5 billion or 83% of those flows, representing the largest monthly inflow in the past two years. July’s eye-popping fixed income flow tally was spread among almost all categories except Canadian corporates. The large inflows into fixed income dwarfed equity, commodities and multi-asset flows. July also marked the entrance of two new ETF providers in Canada, while one existing provider announced termination of its product on August 1st.

Table 1 - ETF Flows by Category - July 2019

	AUM (\$M)	Mkt Shr (%)	July 2019		Jan-July 2019	
			Flow \$M	Flow/AUM	Flow \$M	Flow/AUM
Equity	\$113,845		\$109	0.1%	\$3,245	3.3%
Canada	\$43,994	24%	-\$243	-0.6%	\$37	0.1%
United States	\$37,973	21%	\$124	0.3%	\$1,774	5.7%
International	\$31,878	17%	\$228	0.7%	\$1,435	5.1%
Fixed Income	\$63,446	35%	\$1,533	2.5%	\$7,543	13.9%
Commodities	\$802	0%	\$26	3.4%	\$59	8.9%
Multi-Asset	\$4,640	3%	\$125	2.8%	\$1,377	45.6%
Inverse / Levered	\$956	1%	\$8	0.9%	\$14	1.7%
Total	\$183,689	100%	\$1,802	1.0%	\$12,239	7.8%

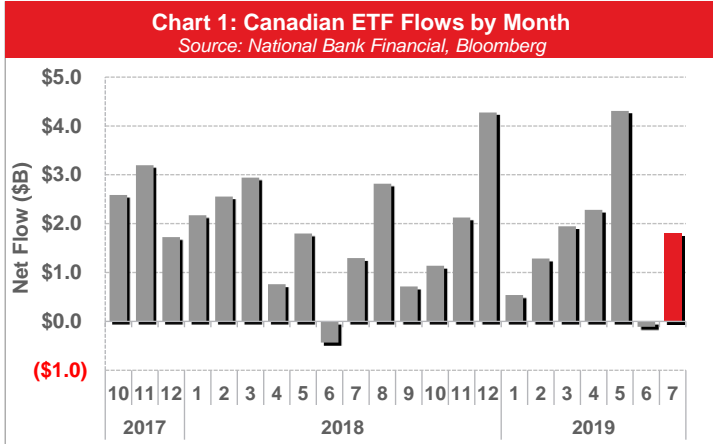
*Equity Flows include option strategies; Source: National Bank of Canada, Bloomberg

Flows by Asset Class and Product: (Table 1 & Table 4, 5 on page 3) The momentum behind Fixed Income ETF inflow does not show any signs of fatigue. Over the past two years, there has been only one month when this asset class saw any outflow at all and it was minor at that. July 2019 was among the highest month of inflow for fixed income ETFs in history. Investor interests was spread among almost all credit and maturity buckets. However, Canada corporate bond ETFs did experience some withdrawals in July, led by a single product XSH (iShares Core Cdn Short Term Corp + Maple). High Yield credit may have seen minor redemptions after adjusting for double-counting the flows into ETFs that hold other ETFs.

This month, we separated into its own category those ETFs holding high interest savings as its underlying, in order to depict a clearer picture for the fixed income landscape (Table 10, Page 4). Two of these ETFs used to be grouped under “Canada Corporate” exposure and its reclassification allows us to notice nearly \$100 million redeemed from corporate bond ETFs. In addition, the ultra-short term bucket now shows a net positive inflow for July, because the outflows from floating rate ETFs were more than offset by these cash-like ETFs. This could reflect a general bearishness among Canadian fixed income investors, who may be responding to geopolitical fears by taking credit risk off the table.

Canadian equity ETFs saw \$243 million in net redemptions. The principal source of the bleed was withdrawals from broad market and financial sector ETFs, but this partially offset by scattered inflows into Low Volatility and Momentum factor ETFs, with some energy ETF creations (perhaps a contrarian play).

Multi-Asset ETF inflows had been bolstered by the popular asset allocation ETFs, but we do notice rising inflows into Alternatives ETFs, which we also group under “multi-asset.” Alternatives are an old category that may be receiving a shot in the arm from regulatory changes allowing for a wider latitude in hedge-fund style portfolio concentration and long-short strategies among all “alternative mutual funds” (including ETFs). In October last year, the CSA published amendments to NI 81-102 and NI 81-104 Commodity Pools to establish the new “alternative mutual fund” regime, which came into force on January 3, 2019. Year-to-date, we’ve seen nine new launches from Desjardins, NBI, Accelerate and Picton Mahoney. Most existing alt-style products also have refilled under the new alternative mutual fund framework. Desjardins’ DANC, NBI’s NATL and Horizon’s HAC have received inflows.



Flows by Provider (Table 2): The number of ETF providers increased to 38, up from 36 last month: Picton Mahoney and Emerge joined the fray in July. This number is likely to keep changing, because as of this writing, (August 2nd), Coin Capital announced the termination of the two ETFs under its brand, effective towards the end of August, indicating its exit from the Canadian ETF market, for now. In other provider news, RBC iShares and Horizons both saw redemptions led by their broad market Canada ETFs, while BMO and Vanguard attracted new money in their fixed income suite and asset allocation portfolios respectively. Mackenzie had a large percentage increase in flows coming from its newly-launched Emerging Markets CAD-hedged ETF (more details in the next section) and U.S. TIPS ETF. CIBC, NBI and SmartBe all amassed more than 10% inflows in July. CIBC's active IG corporate ETF had the largest inflow among its ETFs YTD. NBI's ETFs had enjoyed healthy growth since launch. SmartBe has one ETF under its umbrella, which had also seen net inflows.

New Launches (Table 3): The pace of new launches picked up in July. Four providers launched a combined 17 products (including five U.S. dollar units), including such categories as active bonds, alternative mutual funds, emerging market bonds and thematic technology ETFs.

Franklin Templeton added two actively managed fixed income ETFs to its product shelf, which will each invest in a Franklin Bissett mutual fund:

- Franklin Liberty Core Plus Bond ETF (**FLCP**) invests in series O of Franklin Bissett Core Plus Bond Fund, which provides exposure to Canadian fixed income securities, including federal and provincial and corporate bonds.
- Franklin Liberty Short Duration Bond ETF (**FLSD**) invests in series O of Franklin Bissett Short Duration Bond Fund, which provides exposure to Canadian fixed income securities, including federal and provincial and corporate bonds with average term-to-maturity of five year or less.

Picton Mahoney, a Toronto-based hedge fund manager, joined the fray and launched its first four ETFs under the "alternative mutual fund" framework:

- Picton Mahoney Fortified Multi Strategy Alternative Fund (**PFMS**) invests globally in long and short positions across several asset classes.
- Picton Mahoney Fortified Market Neutral Alternative Fund (**PFMN**), invests in long and short positions to minimize average equity market exposure.

Provider	AUM (\$M)	Mkt Shr (%)	July 2019		Jan-July 2019	
			Flow (\$M)	Flow/AUM	Flow (\$M)	Flow/AUM
1 RBC iShares	\$66,335	36.1%	-\$487	-1%	-\$1,172	-2%
2 BMO	\$57,547	31.3%	\$1,093	2%	\$4,531	9%
3 Vanguard	\$22,105	12.0%	\$414	2%	\$3,307	19%
4 Horizons	\$10,256	5.6%	-\$46	0%	\$46	0%
5 CI First Asset	\$6,635	3.6%	\$227	4%	\$1,699	38%
6 Invesco	\$4,093	2.2%	-\$43	-1%	-\$86	-2%
7 Mackenzie	\$3,804	2.1%	\$337	10%	\$652	22%
8 Purpose	\$3,507	1.9%	\$30	1%	\$350	11%
9 Franklin Templeton	\$1,614	0.9%	\$50	3%	\$797	110%
10 PIMCO	\$1,535	0.8%	\$109	8%	\$660	79%
11 WisdomTree	\$918	0.5%	\$21	2%	\$109	15%
12 AGF	\$885	0.5%	\$1	0%	\$86	12%
13 Harvest	\$692	0.4%	\$7	1%	\$123	22%
14 Fidelity	\$647	0.4%	\$10	2%	\$450	264%
15 Desjardins	\$513	0.3%	\$36	8%	\$158	45%
16 Evolve Funds	\$469	0.3%	\$7	1%	\$84	22%
17 First Trust	\$328	0.2%	-\$30	-9%	-\$60	-17%
18 Manulife	\$303	0.2%	-\$3	-1%	-\$11	-4%
19 Hamilton Capital	\$240	0.1%	\$4	2%	\$5	3%
20 TDAM	\$228	0.1%	\$15	7%	\$71	48%
21 Middlefield	\$227	0.1%	-\$11	-5%	-\$6	-4%
22 Brompton Funds	\$210	0.1%	\$0	0%	\$27	23%
23 CIBC	\$185	0.1%	\$23	14%	\$181	NA
24 NBI	\$120	0.1%	\$24	26%	\$165	NA
25 Lysander	\$100	0.1%	\$2	2%	\$7	7%
26 Bristol Gate	\$67	0.0%	\$1	2%	\$28	92%
27 IA Clarington	\$32	0.0%	\$2	7%	\$15	50%
28 SmartBe	\$26	0.0%	\$3	13%	\$27	NA
29 Arrow Capital	\$15	0.0%	-\$6	-30%	\$8	109%
30 Emerge	\$10	0.0%	\$10	NA	\$10	NA
31 Auspice	\$10	0.0%	\$0	0%	-\$34	-167%
32 Scotia Bank	\$8	0.0%	\$0	4%	\$0	5%
33 Starlight	\$7	0.0%	\$0	0%	\$0	0%
34 Galileo	\$6	0.0%	\$0	0%	\$0	0%
35 Picton Mahoney	\$5	0.0%	\$5	NA	\$5	NA
36 Accelerate	\$3	0.0%	\$0	0%	\$3	NA
37 First Block	\$1	0.0%	\$0	0%	\$0	0%
38 Coin Capital	\$1	0.0%	-\$5	-86%	-\$5	-93%
Total	\$183,689	100.0%	\$1,802	1.0%	\$12,230	12.9%

Excludes Equium Capital's \$8 million exit outflows; Source: National Bank of Canada, Bloomberg

Name	Ticker	Mgmt Fee (%)	Focus
1 Franklin Liberty Core Plus Bond ETF	FLCP	0.55	Agg Bond
2 Franklin Liberty Short Duration Bond ETF	FLSD	0.40	ST Agg Bond
3 Picton Mahoney Fortified Active Extension Alternative ETF	PFAE*	0.95	Alternative Fund
4 Picton Mahoney Fortified Income Alternative Fund ETF	PFIA*	0.95	Alternative Fund
5 Picton Mahoney Fortified Market Neutral Alternative Fund ETF	PFMN*	0.95	Alternative Fund
6 Picton Mahoney Fortified Multi Strategy Alternative Fund ETF	PFMS*	0.95	Alternative Fund
7 Mackenzie Emerging Markets Bond Index ETF (CAD-H)	QEBH	0.45	EM Bond
8 Emerge ARK Fintech Innovation ETF	EAFT**	0.80	Tech Sub Sector
9 Emerge ARK Global Disruptive Innovation ETF	EARK**	0.80	Tech Sub Sector
10 Emerge ARK Genomics & Biotech ETF	EAGB**	0.80	Tech Sub Sector
11 Emerge ARK Autonomous Tech & Robotics ETF	EAUT**	0.80	Tech Sub Sector
12 Emerge ARK AI & Big Data ETF	EAAI**	0.80	Tech Sub Sector

**performance fee in addition to the management fee; **has USD units*

Source: National Bank of Canada, SEDAR, Providers

- Picton Mahoney Fortified Income Alternative Fund (PFIA), mainly invests in long and short positions in North America corporate debt securities.
- Picton Mahoney Fortified Active Extension Alternative Fund (PFAE), invests primarily in a long/short portfolio of Canadian equity securities and maintains 100% net equity market exposure.

Mackenzie launched an Emerging Market Bond Index ETF (QEBH) that invests in U.S.-denominated emerging market government bonds and hedges the foreign currency back to Canadian dollar.

Emerge is also a new ETF provider that joined the Canadian ETF market in July. It launched a suite of thematic technology sub-sector ETFs with both Canadian dollar and U.S. dollar units. The ETFs are actively managed by ARK Invest, a U.S.-based manager of thematic ETFs.

- Emerge ARK Global Disruptive Innovation ETF (EARK)
- Emerge ARK Genomics & Biotech ETF (EAGB)
- Emerge ARK Fintech Innovation ETF (EAFT)
- Emerge ARK AI & Big Data ETF (EAAI)
- Emerge ARK Autonomous Tech & Robotics ETF (EAUT)

July 2019 ETF Flows: Table 4 - 11

Table 4 - Top Single Long ETF Inflows - July 2019				
Ticker	Name	Flow (\$M)	Flow/AUM	
1	ZFL BMO Long Federal Bond Index ETF	\$374	55%	
2	ZLB BMO Low Volatility Canadian Equity ETF	\$224	15%	
3	XEF iShares Core MSCI EAFE IMI Index ETF	\$173	7%	
4	QEBH Mackenzie Emerging Markets Local Currency Bond	\$140	NA	
5	ZAG BMO Aggregate Bond Index ETF	\$134	3%	
6	QTIP Mackenzie US TIPS Index ETF CAD-H	\$132	89%	
7	HTH Horizons US 7-10 Year Treasury Bond CAD-H ETF	\$131	142%	
8	ZLU BMO Low Volatility US Equity ETF	\$108	11%	
9	PSA Purpose High Interest Savings ETF	\$105	6%	
10	ZMU BMO Mid-Term US IG Corporate Bond CAD-H	\$99	9%	
11	PMIF PIMCO Monthly Income Fund CAD-H	\$89	7%	
12	VAB Vanguard Canadian Aggregate Bond Index ETF	\$83	4%	
13	WXM CI First Asset Morningstar Canada Momentum Index	\$83	10%	
14	FSF First Asset Global Financial Sector ETF	\$66	30%	
15	ZIC BMO Mid-Term US IG Corporate Bond Index ETF	\$64	5%	
16	XBB iShares Core Canadian Universe Bond Index ETF	\$57	2%	
17	ZSP BMO S&P 500 Index ETF	\$56	1%	
18	VCN Vanguard FTSE Canada All Cap Index ETF	\$53	3%	
19	VBAL Vanguard Balanced ETF Portfolio	\$52	8%	
20	ZDB BMO Discount Bond Index ETF	\$51	7%	

Source: National Bank of Canada, Bloomberg;

Table 5 - Top Single Long ETF Outflows - July 2019				
Ticker	Name	Flow (\$M)	Flow/AUM	
1	XIC iShares Core S&P/TSX Capped Composite	-\$320	-6%	
2	XSH iShares Core Canadian Short Corp+ Maple Bond	-\$242	-24%	
3	XIU iShares S&P/TSX 60 Index ETF	-\$241	-3%	
4	ZFM BMO Mid Federal Bond Index ETF	-\$139	-18%	
5	PGL Invesco Long Term Government Bond Index ETF	-\$107	-21%	
6	VUS Vanguard US Total Market Index ETF CAD Hedged	-\$104	-13%	
7	HXT Horizon S&P/TSX 60 Index ETF	-\$90	-4%	
8	XWD iShares MSCI World Index ETF	-\$79	-10%	
9	ZEA BMO MSCI EAFE Index ETF	-\$72	-3%	
10	HTB Horizons US 7-10 Year Treasury Bond ETF	-\$67	-41%	
11	XFN iShares S&P/TSX Capped Financials Index ETF	-\$65	-6%	
12	DLR Horizons US Dollar Currency ETF	-\$64	-52%	
13	PHR Purpose Duration Hedged Real Estate Fund	-\$38	-36%	
14	PDF Purpose Core Dividend Fund	-\$37	-13%	
15	ZEB BMO Equal Weight Banks Index ETF	-\$32	-2%	
16	XFR iShares Floating Rate Index ETF	-\$26	-4%	
17	ZDY BMO US Dividend ETF	-\$26	-2%	
18	ZCM BMO Mid Corporate Bond Index ETF	-\$25	-2%	
19	ZWH BMO US High Dividend Covered Call ETF	-\$25	-3%	
20	ZUB BMO Equal Weight US Banks CAD-H Index ETF	-\$25	-5%	

Source: National Bank of Canada, Bloomberg;

YTD 2019 ETF Flows: Table 12 - 19 on page 4, 5

Canadian ETFs saw inflows of \$12 billion YTD 2019, slightly surpassing the figure from the same period last year. Considering the volatility and uncertainty in the market this year, the pace of growth of the ETF industry remains healthy. So far this year, Fixed Income flows more than double that of equity, except for high yield credit products. Sub-investment grade fixed income may be suffering as a result of investors' fear of market meltdowns and widening spreads, but all other credit buckets have seen creations. Despite the double-digit returns of North American equity markets and the positive returns from EAFE and EM regions, equity ETFs only took in \$3 billion due to outflows from broad Canada ETFs, several Canadian and U.S. financial sector and gold miners ETFs and single country/region ETFs such as India and Europe. We continue to observe a defensive positioning as gold bullion ETFs have posted the best flow year since 2017 with more than \$100 million in creations. The popularity of low volatility and quality factor ETFs also speaks to this trend.

Table 6 - ETF Flows by Category - July 2019

Asset Class	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Equity	\$113,845	62%	\$109	0.1%
Fixed Income	\$63,446	35%	\$1,533	2.5%
Commodities	\$802	0%	\$26	3.4%
Multi-Asset	\$4,640	3%	\$125	2.8%
Inverse / Levered	\$956	1%	\$8	0.9%
Total	\$183,689	100%	\$1,802	1.0%

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

Table 7 - Equity ETF Flows by Geography - July 2019

Geography	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada	\$43,994	39%	\$243	-0.6%
United States	\$37,973	33%	\$124	0.3%
DM: Broad	\$12,683	11%	\$151	1.2%
DM: Regional & Country	\$5,717	5%	-\$86	-1.5%
Emerging Markets	\$4,002	4%	\$67	1.7%
Global	\$9,476	8%	\$96	1.0%
Total	\$113,845	100%	\$109	0.1%

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

Table 8 - Equity ETF Flows by Sector* - July 2019

Sector	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Financials	\$6,617	43%	-\$90	-1.4%
Real Estate	\$3,074	20%	-\$15	-0.5%
Health Care	\$1,366	9%	-\$15	-1.1%
Basic Materials	\$1,283	8%	\$9	0.7%
Utilities	\$1,223	8%	-\$2	-0.1%
Energy	\$935	6%	\$17	1.8%
Technology	\$705	5%	-\$7	-1.0%
Other	\$330	2%	-\$1	-0.4%
Total	\$15,533	100%	-\$104	-0.7%

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

Table 12 - Top ETF Inflows - Jan-July 2019

Ticker	Name	Flow (\$M)	Flow/AUM
1	ZAG BMO Aggregate Bond Index ETF	\$1,048	30%
2	ZCPB BMO Core Plus Bond Fund ETF	\$836	27712%
3	ZFL BMO Long Federal Bond Index ETF	\$745	272%
4	VAB Vanguard Canadian Aggregate Bond Index ETF	\$719	45%
5	ZSP BMO S&P 500 Index ETF	\$677	14%
6	WXM CI First Asset Morningstar Canada Momentum	\$556	223%
7	FQC First Asset MSCI Canada Quality Index Class ETF	\$540	6512%
8	ZST BMO Ultra Short-Term Bond ETF	\$508	292%
9	PMIF PIMCO Monthly Income Fund	\$506	64%
10	XBB iShares Core Canadian Universe Bond Index ETF	\$492	21%
11	ZLB BMO Low Volatility Canadian Equity ETF	\$462	41%
12	ZEM BMO MSCI Emerging Markets Index ETF	\$397	81%
13	ZUE BMO S&P 500 CAD-H Index ETF	\$390	34%
14	PSA Purpose High Interest Savings ETF	\$388	27%
15	FGO CI First Asset Enhanced Government Bond ETF	\$379	731%
16	VBAL Vanguard Balanced Etf Portfolio	\$350	102%
17	VGRO Vanguard Growth ETF Portfolio	\$334	68%
18	VUN Vanguard US Total Market Index ETF	\$327	23%
19	ZPR BMO Laddered Preferred Share Index ETF	\$297	16%
20	ZLU BMO Low Volatility US Equity ETF	\$289	41%

Source: National Bank of Canada, Bloomberg;

*Structural inflows due to RBC iShares mergers were taken out

Table 9 - Equity ETF Flows by Focus - July 2019

Focus	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Cap-weighted	\$64,727	57%	-\$446	-0.7%
Dividend / Income	\$16,485	14%	\$14	0.1%
Factor: Low Vol	\$7,364	6%	\$438	6.4%
Factor: Multi-factor	\$2,199	2%	\$10	0.5%
Factor: Fundamental	\$2,889	3%	\$46	1.6%
Sector	\$15,533	14%	-\$104	-0.7%
Thematic	\$2,641	2%	\$30	1.1%
Other	\$2,007	2%	\$121	6.5%
Total	\$113,845	100%	\$109	0.1%

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

Table 10 - Fixed Income ETF Flows by Type - July 2019

Type	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada Aggregate	\$18,464	29%	\$478	2.7%
Canada Government	\$8,435	13%	\$168	2.0%
Canada Corporate	\$11,926	19%	-\$96	-0.8%
U.S. / North America	\$6,467	10%	\$355	5.9%
Foreign	\$4,424	7%	\$411	10.3%
Sub-Investment Grade	\$4,213	7%	\$5	0.1%
Preferred/Convertible	\$7,456	12%	\$53	0.7%
Cash	\$2,060	3%	\$159	8.3%
Total	\$63,446	100%	\$1,533	2.5%

Source: National Bank of Canada, Bloomberg

Table 11 - Fixed Income ETF Flows by Maturity - July 2019

Maturity	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Broad/Mixed	\$30,574	48%	\$993	3.4%
Ultra Short Term	\$6,312	10%	\$152	2.5%
Short Term	\$15,949	25%	-\$135	-0.8%
Mid Term	\$5,805	9%	\$80	1.4%
Long Term	\$3,403	5%	\$301	9.7%
Real Return	\$780	1%	\$147	23.3%
Target Maturity	\$623	1%	-\$5	-0.8%
Total	\$63,446	100%	\$1,533	2.5%

Source: National Bank of Canada, Bloomberg

Table 13 - Top ETF Outflows - Jan-July 2019

Ticker	Name	Flow (\$M)	Flow/AUM
1	XIU iShares S&P/TSX 60 Index ETF	-\$1,809	-21%
2	ZJK BMO High Yield US Corporate Bond Index ETF	-\$382	-35%
3	ZHY BMO High Yield US Corp CAD-H Index ETF	-\$344	-35%
4	RWW/B First Asset MSCI World Low Risk Weighted ETF	-\$318	-47%
5	ZCN BMO S&P/TSX Capped Composite Index ETF	-\$309	-8%
6	ZFH BMO Floating Rate High Yield ETF	-\$239	-66%
7	ZSP/U BMO S&P 500 Index ETF (US\$)	-\$225	-41%
8	ZBK BMO Equal Weight US Banks Index ETF	-\$214	-26%
9	ZDY BMO US Dividend ETF	-\$197	-14%
10	XGD iShares S&P/TSX Global Gold Index ETF	-\$189	-24%
11	XFN iShares S&P/TSX Capped Financials Index ETF	-\$189	-18%
12	XIN iShares MSCI EAFE Index ETF CAD-H	-\$187	-15%
13	PGL Invesco Long Term Government Bond Index ETF	-\$164	-31%
14	XEG iShares S&P/TSX Capped Energy Index ETF	-\$162	-20%
15	ZUB BMO Equal Weight US Banks CAD-H Index ETF	-\$137	-28%
16	XDV iShares Canadian Select Dividend Index ETF	-\$122	-9%
17	XSB iShares Core Canadian Short Term Bond Index ETF	-\$119	-6%
18	ZCS BMO Short Corporate Bond Index ETF	-\$118	-8%
19	XSH iShares Core Canadian Short Corp+ Maple Bond	-\$111	-13%
20	ZCM BMO Mid Corporate Bond Index ETF	-\$99	-9%

Source: National Bank of Canada, Bloomberg

*Structural outflows due to RBC iShares mergers were taken out

Table 14 - ETF Flows by Category - Jan-July 2019

Asset Class	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Equity	\$113,845	62%	\$3,245	3%
Fixed Income	\$63,446	35%	\$7,543	14%
Commodities	\$802	0%	\$59	9%
Multi-Asset	\$4,640	3%	\$1,377	46%
Inverse / Leveraged	\$956	1%	\$14	2%
Total	\$183,689	100%	\$12,239	8%

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

Table 15 - Equity ETF Flows by Geography - Jan-July 2019

Geography	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada	\$43,994	39%	\$37	0%
United States	\$37,973	33%	\$1,774	6%
DM: Broad	\$12,683	11%	\$653	6%
DM: Regional & Country	\$5,717	5%	-\$242	-4%
Emerging Markets	\$4,002	4%	\$512	15%
Global	\$9,476	8%	\$511	6%
Total	\$113,845	100%	\$3,245	3%

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

Table 16 - Equity ETF Flows by Sector* - Jan-July 2019

Sector	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Financials	\$6,617	43%	-\$523	-8%
Real Estate	\$3,074	20%	\$301	12%
Health Care	\$1,366	9%	\$34	3%
Basic Materials	\$1,283	8%	-\$182	-15%
Utilities	\$1,223	8%	\$129	13%
Energy	\$935	6%	-\$228	-20%
Technology	\$705	5%	\$87	18%
Other	\$330	2%	-\$16	-5%
Total	\$15,533	100%	-\$398	-3%

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

Table 17 - Equity ETF Flows by Focus - Jan-July 2019

Focus	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Cap-weighted	\$64,727	57%	\$822	1%
Dividend / Income	\$16,485	14%	\$434	3%
Factor: Low Vol	\$7,364	6%	\$1,073	19%
Factor: Multi-factor	\$2,199	2%	-\$31	-2%
Factor: Fundamental	\$2,889	3%	-\$543	-26%
Sector	\$15,533	14%	-\$398	-3%
Thematic	\$2,641	2%	\$104	5%
Other	\$2,007	2%	\$700	65%
Total	\$113,845	100%	\$3,245	3%

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

Table 18 - Fixed Income ETF Flows by Type - Jan-July 2019

Type	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada Aggregate	\$18,464	29%	\$3,966	29%
Canada Government	\$8,435	13%	\$995	14%
Canada Corporate	\$11,926	19%	\$463	4%
U.S. / North America	\$6,467	10%	\$742	15%
Foreign	\$4,424	7%	\$1,829	74%
Sub-Investment Grade	\$4,213	7%	-\$1,097	-22%
Preferred/Convertible	\$7,456	12%	\$119	2%
Cash	\$2,060	3%	\$525	31%
Total	\$63,446	100%	\$7,543	14%

Source: National Bank of Canada, Bloomberg

Table 19 - Fixed Income ETF Flows by Maturity - Jan-July 2019

Maturity	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Broad/Mixed	\$30,574	48%	\$5,127	21%
Ultra Short Term	\$6,312	10%	\$954	18%
Short Term	\$15,949	25%	\$112	1%
Mid Term	\$5,805	9%	\$174	3%
Long Term	\$3,403	5%	\$913	41%
Real Return	\$780	1%	\$201	37%
Target Maturity	\$623	1%	\$63	11%
Total	\$63,446	100%	\$7,543	14%

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 2017 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 & behavior, 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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