

September 2018 – Fixed Income in Focus

- Canadian ETFs had net inflows of \$716 million in September, driven mainly by fixed income
- New providers are still storming into the market: Fidelity and Coin Capital launched ETFs during the month
- Desjardins launched six new “low CO₂” ETFs and RBC added two years to its target maturity lineup
- ETF assets in Canada have grown 10% by flows in 2018, with a quarter of the year still to go

Summary: Canadian ETFs had inflows of \$716 million in September, despite outflows from Canadian equity. Fixed income flows were healthy and broad based across almost all product categories, with notable creations in preferred share ETFs and some shorter-term focused products (Table 1).

September ETF Flow: Tables 1 - 9

September’s equity flows netted to a small outflow of \$27 million and Table 1 shows that on a net basis, investors collectively made a switch from Canadian to

U.S. equity. This could reflect a growing frustration with the flat Canadian equity market performance year-to-date while the S&P 500 has ripped higher by 10.6% in the same period. The sector ETFs that represent the biggest segments of the Canadian market (namely, financials and energy) each saw outflows in September (Table 4), but creations in Real Estate and Basic Material ETFs ran counter to that trend.

Fixed income ETFs remained market darlings in September; the month’s net inflows of \$652 million are on par with the steady high category inflows that we’ve been observing for the past few months (Chart 2). Notable creations in the preferred share category bolstered overall fixed income ETF flows; DIVS from Evolve and ZPR from BMO both appear in the top 15 inflows for the month (Table 8), while most of the other 17 preferred share ETFs in Canada had inflows of their own.

Further breaking down flows by product (Table 8 & 9), we see that investors pulled assets out of Canadian equity ETFs like XIU (iShares S&P/TSX 60), XFN (iShares TSX Financials) and HXH (Horizons Cdn High Div, swap-based), but offsetting creations in other Canadian equity products like HXT, ZCN and XIC muddy the picture for local market sentiment. In the inflow column, the top product for the month was the high-interest savings ETF from Purpose (PSA); its inflows of \$153 million were the highest in its five-year history. The remaining ETFs in the top 15 were either fixed income products or ultra-low-cost passive index trackers for Canadian or U.S. equity.

Table 1 - ETF Flows by Category - September 2018

	AUM (\$M)	Mkt Shr (%)	September 2018		Jan-Sept 2018	
			Flow \$M	Flow/AUM	Flow \$M	Flow/AUM
Equity	\$105,468		-\$27	0.0%	\$8,943	9%
Canada	\$41,167	25%	-\$324	-0.8%	\$583	1%
United States	\$34,476	21%	\$208	0.6%	\$3,039	11%
International	\$29,826	18%	\$89	0.3%	\$5,322	22%
Fixed Income	\$53,225	33%	\$652	1.2%	\$4,778	10%
Commodities	\$609	0%	\$3	0.5%	-\$6	-1%
Multi-Asset	\$2,989	2%	\$76	2.6%	\$995	50%
Inverse / Levered	\$887	1%	\$12	1.4%	-\$168	-15%
Total	\$163,178	100%	\$716	0.4%	\$14,542	10%

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

Chart 1: Canadian ETF Flows by Month

Source: National Bank Financial, Bloomberg

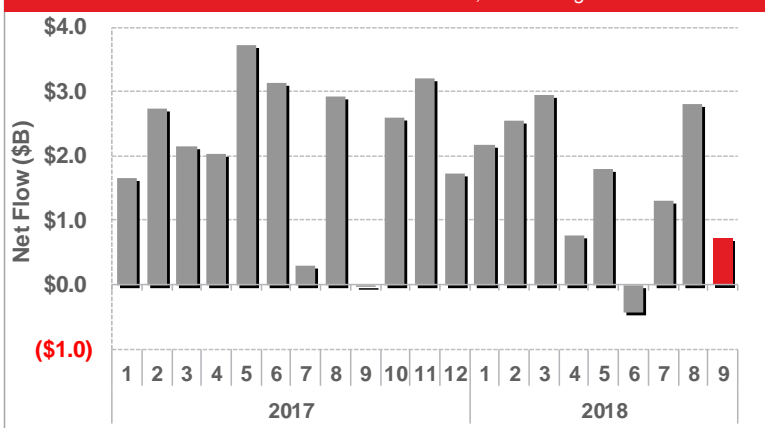


Chart 2: Equity ETF Flow by Geography

Source: National Bank of Canada, Bloomberg

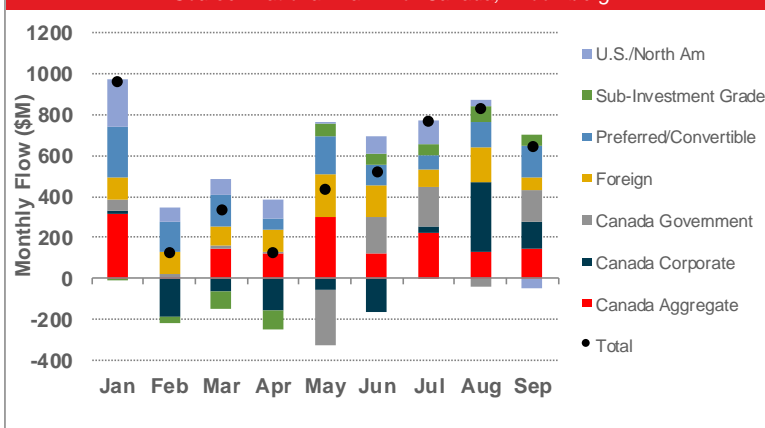


Table 2 - ETF Flows by Category - September 2018

Asset Class	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Equity	\$105,468	65%	-\$27	0.0%
Fixed Income	\$53,225	33%	\$652	1.2%
Commodities	\$609	0%	\$3	0.5%
Multi-Asset	\$2,989	2%	\$76	2.6%
Inverse / Levered	\$887	1%	\$12	1.4%
Total	\$163,178	100%	\$716	0.4%

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

Table 3 - Equity ETF Flows by Geography - September 2018

Geography	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada	\$41,167	39%	-\$324	-0.8%
United States	\$34,476	33%	\$208	0.6%
DM: Broad	\$12,096	11%	\$69	0.6%
DM: Regional & Country	\$6,456	6%	-\$85	-1.3%
Emerging Markets	\$3,494	3%	\$5	0.1%
Global	\$7,780	7%	\$100	1.3%
Total	\$105,468	100%	-\$27	0.0%

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

Table 4 - Equity ETF Flows by Sector* - September 2018

Sector	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Financials	\$7,312	48%	-\$14	-0.2%
Real Estate	\$2,492	16%	\$41	1.7%
Energy	\$1,251	8%	-\$44	-3.3%
Basic Materials	\$1,137	7%	\$21	1.8%
Health Care	\$1,050	7%	\$17	1.6%
Utilities	\$983	6%	-\$1	-0.1%
Technology	\$634	4%	-\$2	-0.3%
Other	\$372	2%	\$0	-0.1%
Total	\$15,231	100%	\$17	0.1%

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

Table 8 - Top Single Long ETF Inflows - September 2018

Rank	Ticker	Name	Flow (\$M)	Flow/AUM
1	PSA	Purpose High Interest Savings ETF	\$153	20%
2	PGL	Invesco Long Term Government Bond Index ETF	\$121	27%
3	RQH	RBC Target 2020 Corporate Bond Index ETF	\$64	56%
4	HXT	Horizon S&P/TSX 60 Index ETF	\$62	3%
5	VFV	Vanguard S&P 500 Index ETF	\$50	3%
6	ZCN	BMO S&P/TSX Capped Composite Index ETF	\$48	1%
7	DIVS	Evolve Active Canadian Preferred Share ETF	\$45	44%
8	VAB	Vanguard Canadian Aggregate Bond Index ETF	\$42	3%
9	MFT	Mackenzie Floating Rate Income ETF	\$42	7%
10	ZPR	BMO Laddered Preferred Share Index ETF	\$41	2%
11	XIC	iShares Core S&P/TSX Capped Composite	\$41	1%
12	VUN	Vanguard US Total Market Index ETF	\$35	2%
13	ZST/L	BMO Ultra Short-Term Bond ETF	\$33	43%
14	VGRO	Vanguard Growth ETF Portfolio	\$32	9%
15	VBAL	Vanguard Balanced Etf Portfolio	\$32	13%

Source: National Bank of Canada, Bloomberg

Table 5 - Equity ETF Flows by Focus - September 2018

Focus	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Cap-weighted	\$60,191	57%	-\$111	-0.2%
Dividend / Income	\$15,754	15%	\$77	0.5%
Factor: Low Vol	\$5,538	5%	\$22	0.4%
Factor: Multi-factor	\$2,214	2%	\$21	0.9%
Factor: Fundamental	\$2,576	2%	-\$28	-1.1%
Sector	\$15,231	14%	\$17	0.1%
Thematic	\$2,667	3%	-\$37	-1.4%
Other	\$1,297	1%	\$12	0.9%
Total	\$105,468	100%	-\$27	0.0%

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

Table 6 - Fixed Income ETF Flows by Type - September 2018

Type	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada Aggregate	\$13,711	26%	\$141	1.0%
Canada Government	\$6,944	13%	\$159	2.3%
Canada Corporate	\$12,306	23%	\$132	1.1%
U.S. / North America	\$4,659	9%	-\$50	-1.0%
Foreign	\$2,212	4%	\$62	2.9%
Sub-Investment Grade	\$4,874	9%	\$55	1.1%
Preferred/Convertible	\$8,520	16%	\$151	1.8%
Total	\$53,225	100%	\$652	1.2%

Source: National Bank of Canada, Bloomberg

Table 7 - Fixed Income ETF Flows by Maturity - September 2018

Maturity	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Broad/Mixed	\$24,322	46%	\$250	1.0%
Ultra Short Term	\$4,595	9%	\$244	5.6%
Short Term	\$16,277	31%	\$53	0.3%
Mid Term	\$4,570	9%	-\$117	-2.5%
Long Term	\$2,285	4%	\$137	6.2%
Real Return	\$564	1%	\$16	2.9%
Target Maturity	\$613	1%	\$70	12.8%
Total	\$53,225	100%	\$652	1.2%

Source: National Bank of Canada, Bloomberg

Table 9 - Top Single Long ETF Outflows - September 2018

Rank	Ticker	Name	Flow (\$M)	Flow/AUM
1	XIU	iShares S&P/TSX 60 Index ETF	-\$377	-4%
2	XFN	iShares S&P/TSX Capped Financials Index ETF	-\$74	-7%
3	XSP	iShares Core S&P 500 Index ETF CAD-H	-\$67	-1%
4	ZMP	BMO Mid Provincial Bond Index ETF	-\$65	-11%
5	HMMJ	Horizons Marijuana Life Sciences Index ETF	-\$51	-5%
6	CBO	iShares 1-5 Year Laddered Corp Index ETF	-\$49	-4%
7	ZSP	BMO S&P 500 Index ETF	-\$48	-1%
8	HXH	Horizons Cdn High Dividend Index ETF	-\$48	-19%
9	XSH	iShares Core Canadian Short Corp+ Maple Bond	-\$40	-4%
10	XEG	iShares S&P/TSX Capped Energy Index ETF	-\$37	-4%
11	XWD	iShares MSCI World Index ETF	-\$36	-6%
12	HTB	Horizons US 7-10 Year Treasury Bond ETF	-\$33	-43%
13	PSB	Invesco 1-5 Year Laddered I.G. Corp Index ETF	-\$31	-4%
14	VE	Vanguard FTSE Developed Europe All Cap Index	-\$29	-11%
15	HBB	Horizons Cdn Select Universe Bond ETF	-\$24	-8%

Source: National Bank of Canada, Bloomberg

YTD Flows (Jan - Sept): Tables 10 - 17

In 2018 so far, a net \$14.5 billion has flowed into Canadian ETFs (Table 10, next page). Despite some spiking volatility at the start of the year, equity ETFs account for the majority of the new money. U.S.-focused and International ETFs each took in more than \$3 billion new assets. Of the \$4.8 billion created in bond ETFs Table 14 shows that new assets are flowing evenly into three main areas: 1) low-cost aggregate products for pure and broad exposure 2) preferred shares, mainly actively managed, and 3) foreign or "global" bond ETFs, many of them also active. See our August report, *A Close Look at Actively Managed Fixed Income ETFs* ([link](#)) for a deeper dive into this space.

Low-cost, passive cap-weighted ETFs dominate the year-to-date inflow leaderboard, Table 16 (next page). Outside of the structural apparent inflow into ZWP (BMO Europe High Dividend Covered Call), top products ZCN, ZSP and VCN all charge less than 10 bps in MER. Vanguard's suite of three multi-asset portfolio ETFs have all gained good traction since their launch in February, but the most aggressively positioned product (VGRO) has seen the highest inflow at \$403 million year-to date.

Table 10 - ETF Flows by Category - Jan-Sept 2018

Asset Class	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Equity	\$105,468	65%	\$8,943	9%
Fixed Income	\$53,225	33%	\$4,778	10%
Commodities	\$609	0%	-\$6	-1%
Multi-Asset	\$2,989	2%	\$995	50%
Inverse / Leveraged	\$887	1%	-\$168	-15%
Total	\$163,178	100%	\$14,542	10%

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

Table 11 - Equity ETF Flows by Geography - Jan-Sept 2018

Geography	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada	\$41,167	39%	\$583	1%
United States	\$34,476	33%	\$3,039	11%
DM: Broad	\$12,096	11%	\$1,340	12%
DM: Regional & Country	\$6,456	6%	\$1,807	39%
Emerging Markets	\$3,494	3%	\$833	29%
Global	\$7,780	7%	\$1,341	21%
Total	\$105,468	100%	\$8,943	9%

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

Table 12 - Equity ETF Flows by Sector* - Jan-Sept 2018

Sector	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Financials	\$7,312	48%	\$603	9%
Real Estate	\$2,492	16%	-\$139	-5%
Energy	\$1,251	8%	-\$259	-17%
Basic Materials	\$1,137	7%	\$67	5%
Health Care	\$1,050	7%	\$94	12%
Utilities	\$983	6%	\$102	11%
Technology	\$634	4%	\$140	35%
Other	\$372	2%	\$12	3%
Total	\$15,231	100%	\$620	4%

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

Table 16 - Top ETF Inflows - Jan-Sept 2018

Ticker	Name	Flow (\$M)	Flow/AUM
1 ZWP*	BMO Europe High Dividend Covered Call ETF	\$1,116	NA
2 ZCN	BMO S&P/TSX Capped Composite Index ETF	\$811	26%
3 ZSP	BMO S&P 500 Index ETF	\$625	16%
4 VCN	Vanguard FTSE Canada All Cap Index ETF	\$484	43%
5 PMIF	PIMCO Monthly Income Fund CAD-H	\$450	163%
6 XEF	iShares Core MSCI EAFE IMI Index ETF	\$437	28%
7 VAB	Vanguard Canadian Aggregate Bond Index ETF	\$414	31%
8 VGRO	Vanguard Growth ETF Portfolio	\$403	NA
9 MFT	Mackenzie Floating Rate Income ETF	\$396	145%
10 PDC	Invesco Canadian Dividend Index ETF	\$384	139%
11 ZEA	BMO MSCI EAFE Index ETF	\$359	18%
12 PSA	Purpose High Interest Savings ETF	\$345	61%
13 HMMJ	Horizons Marijuana Life Sciences Index ETF	\$338	67%
14 VFV	Vanguard S&P 500 Index ETF	\$334	23%
15 VUN	Vanguard US Total Market Index ETF	\$334	32%

*Structural inflow into ZWP as it was wrapped under ZWE upon launch; Source: National Bank of Canada, Bloomberg

Flows by Provider: Table 18 next page

As of September, the highest inflows year-to-date have been going to Vanguard, BMO, Mackenzie and Horizons ETFs. At the same time, the highest percentage flows have gone to Evolve Funds, Desjardins, Hamilton Capital and PIMCO, highlighting the disparate nature of the competitive landscape in Canada.

New Launches: Table 19 next page

Three firms entered the ETF market since our August Flow report: Fidelity and Coin Capital each launched ETFs in September and Starlight Capital's first ETFs are expected to start trading on October 2nd. In total, the Canadian market saw 19 new ETF listings since the start of September. Here are some details:

Table 13 - Equity ETF Flows by Focus - Jan-Sept 2018

Focus	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Cap-weighted	\$60,191	57%	\$5,195	10%
Dividend / Income	\$15,754	15%	\$1,322	9%
Factor: Low Vol	\$5,538	5%	\$381	8%
Factor: Multi-factor	\$2,214	2%	\$446	26%
Factor: Fundamental	\$2,576	2%	-\$312	-11%
Sector	\$15,231	14%	\$620	4%
Thematic	\$2,667	3%	\$992	68%
Other	\$1,297	1%	\$300	32%
Total	\$105,468	100%	\$8,943	9%

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

Table 14 - Fixed Income ETF Flows by Type - Jan-Sept 2018

Type	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Canada Aggregate	\$13,711	26%	\$1,492	12%
Canada Government	\$6,944	13%	\$318	5%
Canada Corporate	\$12,306	23%	-\$110	-1%
U.S. / North America	\$4,659	9%	\$677	17%
Foreign	\$2,212	4%	\$1,102	95%
Sub-Investment Grade	\$4,874	9%	\$77	2%
Preferred/Convertible	\$8,520	16%	\$1,221	17%
Total	\$53,225	100%	\$4,778	10%

Source: National Bank of Canada, Bloomberg

Table 15 - Fixed Income ETF Flows by Maturity - Jan-Sept 2018

Maturity	AUM (\$M)	Mkt Shr	Flow (\$M)	Flow/AUM
Broad/Mixed	\$24,322	46%	\$3,266	15%
Ultra Short Term	\$4,595	9%	\$1,563	55%
Short Term	\$16,277	31%	\$104	1%
Mid Term	\$4,570	9%	-\$422	-8%
Long Term	\$2,285	4%	\$221	10%
Real Return	\$564	1%	\$87	18%
Target Maturity	\$613	1%	-\$42	-6%
Total	\$53,225	100%	\$4,778	10%

Source: National Bank of Canada, Bloomberg

Table 17 - Top ETF Outflows - Jan-Sept 2018

Ticker	Name	Flow (\$M)	Flow/AUM
1 XIU	iShares S&P/TSX 60 Index ETF	-\$1,154	-10%
2 CBO	iShares 1-5 Year Laddered Corp Index ETF	-\$406	-25%
3 ZDV	BMO Canadian Dividend ETF	-\$387	-44%
4 XRE	iShares S&P/TSX Capped REIT Index ETF	-\$239	-17%
5 HNU	BetaPro Natural Gas 2x Daily B	-\$229	-78%
6 ZCS	BMO Short Corporate Bond Index ETF	-\$209	-13%
7 XEG	iShares S&P/TSX Capped Energy Index ETF	-\$203	-20%
8 XCB	iShares Canadian Corporate Bond Index ETF	-\$195	-11%
9 ZCM	BMO Mid Corporate Bond Index ETF	-\$188	-14%
10 ZMU	BMO Mid-Term US IG Corp CAD-H Index ETF	-\$187	-35%
11 CDZ	iShares S&P/TSX Canadian Dividend Aristocrats	-\$179	-16%
12 ZEQ	BMO MSCI Europe High Quality CAD-H Index ET	-\$178	-39%
13 XIC	iShares Core S&P/TSX Capped Composite	-\$154	-4%
14 ZMP	BMO Mid Provincial Bond Index ETF	-\$143	-21%
15 XHY	iShares US High Yield Bond Index ETF CAD-H	-\$134	-21%

RBC broadened the span of its target maturity lineup to seven calendar years with the launch of target 2024 and 2025 ETFs (RQL and RQN). Each of the target maturity ETFs tracks a FTSE Canada Target Maturity Corporate Bond Index.

Mutual Fund heavyweight Fidelity made its ETF debut with six dividend products. The new ETFs track Fidelity's custom rule-based indices calculated by S&P Dow Jones. Concurrently, Fidelity has also launched six mutual funds that wrap these ETFs individually. In addition to the six direct mutual fund wrappers, the Fidelity Tactical Global Dividend ETF Fund holds all three geographically-focused ETFs. The new funds screen securities based on a composite score based on three factors: dividend yield, payout ratio and dividend growth. The two Fidelity U.S. equity-focused Rising Rates Index ETFs (FCRR and FCRH) also have a fourth factor: correlation to rising interest rates. Once the portfolio securities are selected according to the index rules, FCCD, FCID, FCUD and FCUH reallocate 40% weight to the five highest yielding sectors. FCRR and FCRH maintain sector neutral weights relative to the investment universe.

New provider Coin Capital entered the Canadian ETF market with two ETFs. Coin Capital Investment Management is a division of Coinsquare, the digital asset trading platform. LDGR tracks the iSTOXX Yewno Developed Markets Blockchain Index, which uses Yewno's proprietary algorithm to select global blockchain companies in the index. For instance, one of the algorithm's key inputs is patent filings related to blockchain intellectual property. THINK tracks the iSTOXX Developed Markets B.R.AI.N Index, which invests in global companies that work in biotechnology, robotics, artificial intelligence and nanotechnology.

Desjardins added six new ETFs to its existing lineup of multifactor ETFs. All six of the new ETFs have "responsible investing" (RI) mandates for investors who wish to focus on climate issues. Of the six, three are "low carbon" products for Canada, U.S. and international multifactor exposure; two are cap-weighted "low CO₂" ETFs for Canada and the U.S.; and one is an active bond ETF, also with a low CO₂ mandate.

PIMCO introduced a USD-denominated listing (PMIF/U) for its existing ETF PMIF (PIMCO Monthly Income Fund). PMIF is the CAD-denominated ETF series of the mutual fund with the same name launched in January 2011.

Starlight Capital has announced that it will enter the Canadian ETF market by launching two mutual funds with ETF series. The ETFs that will begin trading on October 2 are: Starlight Global Real Estate Fund (SCGR) and Starlight Global Infrastructure Fund (SCGI).

Table 18 - ETF Flows by Provider - September 2018

Provider	AUM (\$M)	Mkt Shr (%)	September 2018		Jan-Sept 2018	
			Flow (\$M)	Flow/AUM	Flow (\$M)	Flow/AUM
1 BlackRock iShares	\$59,485	36.5%	\$469	-1%	-\$288	0%
2 BMO	\$50,372	30.9%	\$223	0%	\$3,371	7%
3 Vanguard	\$17,713	10.9%	\$312	2%	\$3,667	27%
4 Horizons	\$10,668	6.5%	-\$6	0%	\$1,324	15%
5 RBC	\$5,132	3.1%	\$76	2%	\$374	8%
6 First Asset	\$4,581	2.8%	\$62	1%	\$716	19%
7 Invesco	\$4,175	2.6%	\$83	2%	\$726	21%
8 Mackenzie	\$2,963	1.8%	\$87	3%	\$1,660	128%
9 Purpose	\$2,693	1.7%	\$156	6%	\$723	42%
10 PIMCO	\$761	0.5%	\$12	2%	\$477	160%
11 AGF	\$733	0.4%	\$15	2%	\$375	110%
12 WisdomTree	\$679	0.4%	\$11	2%	\$294	77%
13 Harvest	\$598	0.4%	\$9	2%	\$137	31%
14 Franklin Templeton	\$560	0.3%	\$6	1%	\$293	121%
15 First Trust	\$422	0.3%	\$1	0%	-\$26	-6%
16 Desjardins	\$350	0.2%	\$10	3%	\$234	180%
17 Evolve Funds	\$318	0.2%	\$52	19%	\$226	255%
18 Manulife	\$303	0.2%	\$6	2%	\$33	13%
19 Hamilton Capital	\$244	0.1%	\$0	0%	\$156	161%
20 Lysander	\$117	0.1%	\$2	1%	\$28	30%
21 Brompton Group	\$89	0.1%	\$0	0%	-\$3	NA
22 TDAM	\$82	0.0%	\$3	4%	-\$54	-41%
23 Fidelity	\$61	0.0%	\$62	NA	\$62	NA
24 Bristol Gate	\$26	0.0%	\$3	15%	\$25	NA
25 Auspice	\$20	0.0%	\$0	0%	-\$4	-15%
26 Equium Capital	\$10	0.0%	-\$2	-17%	\$3	44%
27 Scotia Bank	\$8	0.0%	\$0	0%	\$8	NA
28 Coin Capital	\$6	0.0%	\$6	NA	\$6	NA
29 Arrow Capital	\$6	0.0%	-\$3	-31%	\$4	175%
30 Galileo	\$4	0.0%	\$0	0%	\$0	0%
31 Starlight Capital	na	na	na	na	na	na
Total Displayed*	\$163,178	100.0%	\$716	0.4%	\$14,546	10%

*Excludes \$4 mln Excel Funds exit flows; Source: National Bank of Canada, Bloomberg

Table 19: New Launches since September 2018

Name	Ticker	Launch Date	Mgmt Fee (%)	Type
1 RBC Target 2024 Corporate Bond Index ETF	RQL	Sep 12	0.25	Bond
2 RBC Target 2025 Corporate Bond Index ETF	RQN	Sep 12	0.25	Bond
3 Fidelity Canadian High Dividend Index ETF	FCCD	Sep 18	0.35	Equity
4 Fidelity International High Dividend Index ETF	FCID	Sep 18	0.45	Equity
5 Fidelity US High Dividend Index ETF	FCUD	Sep 18	0.35	Equity
6 Fidelity US High Dividend Currency Neutral Index ETF	FCUH	Sep 18	0.38	Equity
7 Fidelity US Dividend For Rising Rates Index ETF	FCRR	Sep 18	0.35	Equity
8 Fidelity US Dividend For Rising Rates Currency Neutral	FCRH	Sep 18	0.38	Equity
9 Coincapital Stoxx Blockchain Patents Innovation	LDGR	Sep 20	0.64	Equity
10 Coincapital Stoxx BR AI N Index Fund	THNK	Sep 20	0.64	Equity
11 Desjardins RI Canada Multifactor - Low CO2 ETF	DRFC	Sep 27	0.50	Equity
12 Desjardins RI USA Multifactor - Low CO2 ETF	DRFU	Sep 27	0.50	Equity
13 Desjardins RI Dev ex-USA Cad Multifactor-Low CO2	DRFD	Sep 27	0.60	Equity
14 Desjardins RI Canada - Low CO2 Index ETF	DRMC	Sep 27	0.25	Equity
15 Desjardins RI USA - Low CO2 Index ETF	DRMU	Sep 27	0.25	Equity
16 Desjardins RI Active Canadian Bond - Low CO2 ETF	DRCU	Sep 27	0.35	Bond
17 PIMCO Monthly Income Fund (US\$)	PMIF/U	Sep 28	0.75	Bond
18 Starlight Global Real Estate Fund	SCGR	Oct 02	0.90	Equity
19 Starlight Global Infrastructure Fund	SCGI	Oct 02	0.90	Equity

Source: National Bank of Canada, SEDAR, ETF Providers

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 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 & 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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