

July 2024: U.S.-Listed ETFs Broke Their Monthly Inflow Record With \$133 Billion

- U.S. ETFs smashed the monthly inflow record in July, a remarkable feat in an otherwise slow summer month
- Inflows poured in from all categories of the ETF markets, but predominantly U.S. assets
- Mid/small-cap ETFs took the spotlight in July as higher rate cut expectations are fueling strong demand
- The debut of spot Ethereum ETFs injected fresh assets into crypto ETFs, including a \$10 billion CEF conversion

Summary (Table 1, Chart 1): In July, U.S.-listed ETFs broke the all-time monthly inflows record in history, gaining an eye-watering \$133 billion inflows, narrowly edging out the record of \$129 billion set in December of 2023. The inflows poured towards all segments of the ETF market, reflecting a widespread risk-on sentiment despite sharp selloffs in some U.S. stocks towards the end of the month. The demand for U.S. equity was particularly strong through most of July, with meaningful investments into both large-cap and mid/small-cap ETFs. Among fixed income ETFs, long-term, cash-like, investment-grade and sub-investment grade all received inflows. Following the success of the physical bitcoin ETF launches in the U.S. from earlier in the year, the same batch of providers quickly approved and launched physical Ethereum ETFs in July as a second act, which sparked \$13 billion of flows into crypto-assets, bringing the total AUM in the category to over \$72 billion at the end of July.

Equity ETFs by Geography (Table 4): The record-breaking equity ETF inflows were primarily driven by unflagging demand for U.S. stocks. Aside from some modest allocations to broad international developed ETFs, India ETFs and a few global funds, all other major regions & countries experienced outflows. This U.S.-centric investment phenomenon coincided with heightened global attention on U.S. politics and some dovish remarks from the Fed.

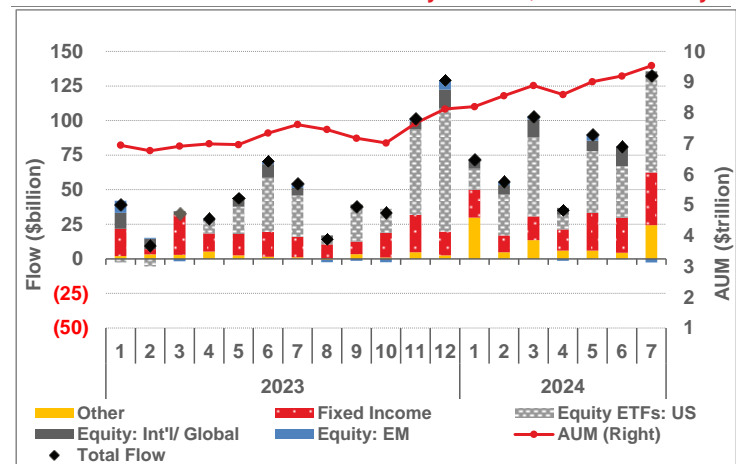
Equity Sector ETFs (Table 5, 12): In July as in past months, technology ETFs continued to hog the top spot in the sector table, despite the fact that the S&P 500 Technology Index posted its second month of negative price return this year. Meanwhile, financial sector ETFs saw strong demand this month as U.S. financial stocks (particularly regional banks) surged. The upswing in regional bank performance may have been boosted by the softer-than-expected CPI release, raising expectations for interest rate cuts by the Fed in September. Other rate-sensitive sectors such as Real Estate and Utilities also performed well this month.

Table 1: ETF Flows by Category

	AUM (\$B)	Mkt Shr	July 2024		YTD July 2024	
			Flow (\$B)	Flow/AUM	Flow (\$B)	Flow/AUM
Equity	\$7,341		\$70.3	1.0%	\$325.7	5.2%
U.S. Broad/Large-Cap	\$2,616	27%	\$33.3	1.3%	\$140.6	6.6%
U.S. Other	\$3,193	33%	\$35.0	1.1%	\$122.0	4.5%
Int'l / Global	\$1,207	13%	\$4.7	0.4%	\$57.2	5.4%
Emerging Markets	\$325	3%	-\$2.7	-0.8%	\$5.9	2.0%
Fixed Income	\$1,681	18%	\$38.1	2.4%	\$155.4	10.2%
Commodity	\$146	2%	\$2.5	1.8%	-\$2.5	-2.0%
Multi-Asset	\$178	2%	\$6.3	3.7%	\$36.7	27.5%
Levered Long	\$104	1%	\$3.1	3.0%	-\$1.6	-1.9%
Inverse	\$13	0%	-\$0.4	-3.1%	\$0.3	2.2%
Crypto-Asset	\$72	1%	\$12.9	23.8%	\$56.3	3016.7%
Total	\$9,533	100%	\$132.9	1.4%	\$570.4	7.0%

Source: NBF ETF Research, Bloomberg. Data as of July 31, 2024.

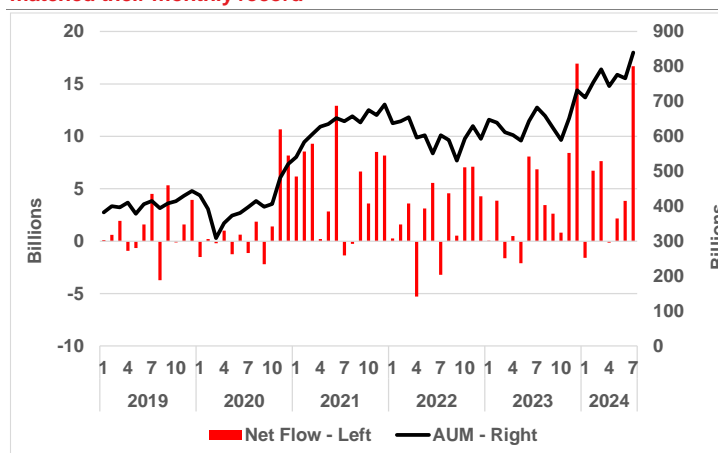
Chart 1: U.S.- Listed ETF Flow and AUM by month - \$133 billion in July



Source: NBF ETF Research, Bloomberg. Data as of July 31, 2024.

Equity Factor ETFs (Table 8, 15): In July, U.S. mid/small-cap equity ETFs had their second-highest monthly inflow in history, only trailing the record haul from December 2023 by a thin margin (Chart 2). At the time, those December flows were likely fueled by tax harvesting trades at the end of the year. July’s \$16 billion inflows were in-sync with a small-cap rally that saw the Russell 2000 index rise by 10.2% in a single month. In contrast, the S&P 500 index only returned 1.2% in the same period. Small-cap strategies are growing in interest and attention, encouraged by firmer Fed cut probability; small-cap companies, with their greater reliance on borrowing and smaller cash piles, tend to do better in a lower interest rate environment. Underwhelming earnings from large-cap leaders like Google and Tesla are reminding some investors of over-concentration risk, which may have also propelled inflows into small-cap ETFs. That said, small-cap inflows appear not to have come from rotations away from the S&P 500, as the trading vehicle **SPY** continued to register inflows in July. It’s up for debate if the small-cap trade will be sustainable, given the factor’s track record of underperforming the S&P 500 in the past one, three, five *and* 10 years, as well as underperforming eight out of 10 calendar years in the past decade. National Bank’s team of economists and strategists are currently underweighting small cap, citing softer employment numbers, falling household savings rate and recessionary risks in the U.S.

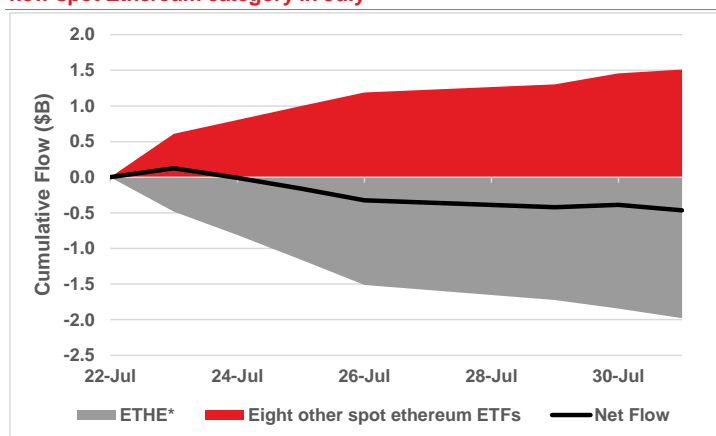
Chart 2: Inflows into U.S.-listed mid/small-cap equity ETFs nearly matched their monthly record



Source: NBF ETF Research, Bloomberg. Data as of July 31, 2024.

Fixed Income ETFs (Table 6, 7, 13, 14): Fixed income ETF investors expressed great optimism in July, pouring in a whopping \$36.7 billion into the asset class. Broad appetites for bonds were reflected across almost all credit and maturity categories: high yield (**USHY**), investment-grade corporate (**LQD**), aggregate (**AGG**, **BND**), long-term treasury (**TLT**) and muni bond (**CGMU**) all have at least one representative ETF in the top inflow table (Table 9). The high yield category stands out when measured in terms of flows as a percentage of starting AUM. The high yield credit spread (the ICE BofA US High Yield Index Option-Adjusted Spread) reached 3.02% in July, its lowest level since December 2021, and it continues to tighten; as a result, sub-investment grade ETFs have become increasingly attractive to yield-seeking investors. The ultra-low-cost **USHY**, in particular, enjoyed remarkable inflows. After taking in \$2.8 billion in July, or 20% of the starting AUM, iShares’ **USHY** is “only” \$300 million away from overtaking the long-standing iShares’ flagship high yield ETF **HYG** to become the largest high yield ETF in the U.S. Another high yield product that benefited from the improving credit conditions is Janus Henderson AAA CLO ETF (**JAAA**). This “cash alternative” ETF welcomed an influx of \$1.1 billion in July.

Chart 3: Spot Ethereum ETFs (outside of ETHE which converted from a closed-end fund) gathered \$1.5 billion in flows since launch. ETHE saw similarly high outflows, resulting in a net \$0.5 billion outflow for the new spot Ethereum category in July



* Converted assets into ETHE and ETH are excluded
Source: NBF ETF Research, Bloomberg. Data as of July 31, 2024.

fund spun off 10% of its assets to seed Grayscale Ethereum Mini Trust (ETH) and converted the remaining assets to Grayscale Ethereum Trust (ETHE). More discussions around these crypto-asset ETF launches can be found below.

Table 2: U.S.-listed spot crypto-asset ETFs launched in July, grouped by underlying and sorted by AUM

	Name	Ticker	AUM (\$M)	Flow (\$B)	Fee/after waiver (%)	Waiver Details	Underlying	Custodian
1	Grayscale Bitcoin Mini Trust	BTC	1,775	1,775	0.15		Bitcoin	Coinbase
2	Grayscale Ethereum Trust	ETHE	6,628	(977)	2.50		Ethereum	Coinbase
3	Grayscale Ethereum Mini Trust	ETH	1,155	186	0.15 / 0	6 months or AUM reaches \$2 billion	Ethereum	Coinbase
4	iShares Ethereum Trust	ETHA	622	634	0.25 / 0.12	1 year or AUM reaches \$2.5 billion	Ethereum	Coinbase
5	Fidelity Ethereum Fund	FETH	278	284	0.25 / 0	Until 12/31/24	Ethereum	Fidelity
6	Bitwise Ethereum ETF	ETHW	276	287	0.20 / 0	6 months or AUM reaches \$0.5 billion	Ethereum	Coinbase
7	VanEck Ethereum ETF	ETHV	60	61	0.20 / 0	1 year or AUM reaches \$1.5 billion	Ethereum	Gemini
8	Franklin Ethereum ETF	EZET	31	32	0.19 / 0	Until 01/31/25 or AUM reaches \$10 billion	Ethereum	Coinbase
9	Invesco Galaxy Ethereum ETF	QETH	15	15	0.25		Ethereum	Coinbase
10	21Shares Core Ethereum ETF	CETH	12	13	0.21 / 0	6 months or AUM reaches \$0.5 billion	Ethereum	Coinbase

* ETF flow excludes converted assets

Source: NBF ETF Research, Bloomberg, Providers. Data as of July 31, 2024.

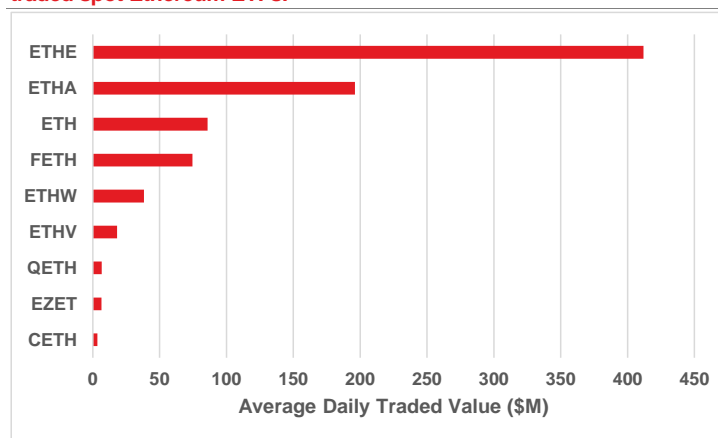
Fee (Table 2): Similar to the spot bitcoin ETF launches in January, the introduction of spot Ethereum ETFs kicked off a fierce fee war. Even Grayscale, which kept its bitcoin ETF fee at 1.5% in January while competitors announced waves of fee reductions on their bitcoin ETFs, joined the fray this time, bringing the cost of owning ether ETF down to as low as 15 bps annually (before waivers).

Flow (Chart 3): The flow pattern overall resembles that of spot bitcoin ETFs at their inception, but at a lower level: excluding converted assets from ETHE and ETH, we observed persistent outflows from Grayscale’s established but expensive ETHE, and net inflows of a similar scale to other cheaper products. However, on a net basis, the spot Ethereum ETFs had a cumulative net outflow of \$460 million over their first seven trading days (as of July 31). In contrast, spot bitcoin ETFs had gathered \$1.2 billion of fresh net assets by their seventh trading day from debut, excluding the converted assets from GBTC.

The explanation for the lacklustre demand for spot Ethereum ETFs might be twofold: first, investors who took advantage of the elimination of ETHE’s discount-to-NAV may have exited to crystalize their gains; second, Ethereum’s price decline after the spot Ethereum ETF launches might have deterred investors from this still-volatile and speculative asset class.

Trading volume (Chart 4): Despite initial outflows, this new ETF category saw decent demand from a trading perspective. Since debut, spot Ethereum ETFs together have traded around \$1 billion in volume per day. Grayscale’s ETHE is the most traded ETF measured by dollars traded. iShares’ ETHA ranked second with \$200 million in shares traded on average, as of July 31, 2024.

Chart 4: Grayscale’s ETHE and iShares’ ETHA are currently the most traded spot Ethereum ETFs.



Source: NBF ETF Research, Bloomberg. Data as of July 31, 2024.

GBTC’s spin-off: Similar to the ETHE-ETH case, Grayscale’s multi-billion spot bitcoin ETF GBTC underwent a spin-off in July to form Grayscale Bitcoin Mini Trust (BTC), which offers the same exposure as GBTC but with only one-tenth of GBTC’s MER. On July 30’s market-open, the price of GBTC price declined by 10%, which might initially look like a 10% investment loss to GBTC unitholders. However, the next day when BTC

launched, those unitholders would have received units of **BTC** with value equivalent to the loss amount. Therefore, their net investments in Grayscale’s spot bitcoin ETFs are not affected by the spin-off. The spin-off also didn’t impact **GBTC**’s shares outstanding (in other words, there was technically no recreation/redemption of **GBTC** caused by the spin-off); nevertheless, we view the spin-off assets as an “outflow” from **GBTC** into a new product and report it as such in our flow tables.

ESG ETFs (Table 19): The interest in ESG appears to be making a comeback: July marked the third consecutive month of inflows into U.S.-listed ESG ETFs. Two S&P 500 ESG ETFs (SPDR’s **EFIV** and Xtracker’s **SNPE**) led the creations, while the iShares ESG Aware MSCI USA ETF (**ESGU**) led the outflows. This interesting rotation could be attributed to performance differences: **SNPE** outperformed **ESGU** by 1.5% annually in the past five years, with **SPY** falling in-between. The two ESG portfolios also differ significantly as **SNPE** currently holds neither Meta nor Amazon while **ESGU** holds all “magnificent seven” stocks.

Fixed income ESG ETFs also received inflows. The most notable one is the new launch **KCSH** (KraneShares Sustainable Ultra Short Duration Index ETF), a cash-like ETF that garnered a \$100 million institutional creation right out of the gate.

Top Performing ETFs (Table 3):

In July, regional bank ETFs have exhibited strong returns. As discussed in the Equity Sector and Factor sections, this price rally may be related to investors’ growing optimism for Fed rate cuts and bullishness on small-cap stocks.

Table 3: Best Performing ETFs* – July 2024

Ticker	Name	Total Return (%)	AUM (\$M)	Flow (\$M)
1 QABA	First Trust NASDAQ ABA Community Bank Index	19.4	80	11
2 ITB	iShares U.S. Home Construction ETF	19.3	3,221	87
3 KBWR	Invesco KBW Regional Banking E	18.7	58	-1
4 KRE	SPDR S&P Regional Banking ETF	18.6	3,581	392
5 XHB	SPDR S&P Homebuilders ETF	16.8	2,245	203
6 KBE	SPDR S&P Bank ETF	16.3	2,035	342
7 IAT	iShares U.S. Regional Banks ETF	16.0	674	31
8 XTL	SPDR S&P Telecom ETF	14.6	80	10
9 PSCF	Invesco S&P SmallCap Financials ETF	15.1	21	1
10 SVAL	iShares US Small Cap Value Factor ETF	14.6	158	77

*Excluding leveraged/inverse ETFs. Source: NBF ETF Research, Bloomberg. Data as of July 31, 2024.

July 2024 ETF Flows: Tables 4 - 10

Geography	AUM (\$B)	Mkt Shr	Flow (\$B)	Flow/AUM
U.S.	\$5,809		\$68.3	1.2%
Broad/Large Cap	\$2,616	36%	\$33.3	1.3%
U.S. Other	\$3,193	43%	\$35.0	1.1%
International Developed	\$742		\$1.9	0.3%
Broad Int'l Dev	\$579	8%	\$4.3	0.8%
Broad Europe	\$51	1%	-\$1.7	-3.3%
Japan	\$38	1%	-\$0.3	-0.7%
Canada	\$10	0%	-\$0.6	-6.1%
Other Developed	\$64	1%	\$0.2	0.3%
Emerging Markets	\$325		-\$2.7	-0.8%
Broad Cap Weighted	\$217	3%	-\$0.4	-0.2%
China (A+H)	\$17	0%	-\$2.1	-10.8%
Other EM	\$90	1%	-\$0.1	-0.2%
Global/Regional	\$465	6%	\$2.8	0.6%
Total Displayed	\$7,341	100%	\$70.3	1.0%

Source: National Bank of Canada, Bloomberg

Sector	AUM (\$B)	Mkt Shr	Flow (\$B)	Flow/AUM
Technology	\$264	27%	\$3.7	1.4%
Financials	\$75	8%	\$3.0	4.4%
Utilities	\$26	3%	\$1.3	5.9%
Industrials	\$48	5%	\$0.9	2.0%
Health Care	\$100	10%	\$0.7	0.8%
Energy	\$83	8%	\$0.7	0.9%
Real Estate	\$78	8%	\$0.6	0.8%
Consumer Discretionary	\$38	4%	\$0.1	0.2%
Consumer Staples	\$27	3%	-\$0.1	-0.5%
Materials	\$46	5%	-\$0.9	-2.0%
Communication Services	\$38	4%	-\$1.2	-3.2%
ESG	\$91	9%	\$0.3	0.3%
Thematic	\$70	7%	\$0.4	0.6%
Total Displayed	\$983	100%	\$9.4	1.0%

*Includes all geographic focus; Source: National Bank of Canada, Bloomberg
QQQ is classified as a broad market ETF and does not belong to technology sector

Type	AUM (\$B)	Mkt Shr	Flow (\$B)	Flow/AUM
U.S. Aggregate	\$410	24%	\$6.7	1.7%
U.S. Government	\$526	31%	\$10.5	2.1%
U.S. Municipals	\$124	7%	\$3.4	2.8%
U.S. I.G. Corporate	\$255	15%	\$7.3	3.0%
Developed Markets&Global	\$164	10%	\$3.4	2.2%
Emerging Markets	\$30	2%	\$0.3	1.0%
Sub-investment Grade	\$129	8%	\$6.5	5.3%
Convertibles and Preferreds	\$41	2%	\$0.0	0.1%
Total Displayed	\$1,681	100%	\$38.1	2.4%

Source: National Bank of Canada, Bloomberg

Maturity	AUM (\$B)	Mkt Shr	Flow (\$B)	Flow/AUM
Broad/Mixed	\$826	49%	\$19.2	2.4%
Ultra Short Term	\$243	14%	\$4.7	2.0%
Short Term	\$230	14%	\$2.7	1.2%
Mid Term	\$208	12%	\$4.5	2.3%
Long Term	\$120	7%	\$5.7	5.2%
Target Maturity	\$52	3%	\$1.2	2.5%
Rate Hedged	\$2	0%	\$0.0	0.9%
Total Displayed	\$1,681	100%	\$38.1	2.4%

Source: National Bank of Canada, Bloomberg

Factor	AUM (\$B)	Mkt Shr	Flow (\$B)	Flow/AUM
Small/Mid Cap	\$573	23%	\$11.8	2.2%
Income	\$415	16%	\$2.6	0.7%
Growth	\$567	23%	\$2.3	0.4%
Value	\$559	22%	\$2.1	0.4%
Quality	\$88	3%	\$1.1	1.3%
Low Vol	\$56	2%	\$0.4	0.8%
Momentum	\$29	1%	\$0.2	0.7%
Multi-Factor and Other	\$230	9%	\$5.2	2.4%
Total Displayed	\$2,519	100%	\$25.7	1.1%

*Includes all geographic focus, excluding sector ETFs; Source: NBC, Bloomberg

Ticker	Name	Flow (\$B)	Flow/AUM
1	VOO Vanguard S&P 500 ETF	\$12.3	2.6%
2	IWM iShares Russell 2000 ETF	\$7.9	13.1%
3	ETHE Grayscale Ethereum Trust	\$7.1	NA
4	IVV iShares Core S&P 500 ETF	\$7.0	1.4%
5	SPY SPDR S&P 500 ETF Trust	\$4.7	0.9%
6	VTI Vanguard Total Stock Market ETF	\$4.0	1.0%
7	RSP Invesco S&P 500 Equal Weight ETF	\$3.8	7.0%
8	USHY iShares Broad USD HY Corporate Bond ETF	\$2.9	22.0%
9	IBIT iShares Bitcoin Trust	\$2.3	12.4%
10	TLT iShares 20+ Year Treasury Bond ETF	\$2.2	4.2%
11	AGG iShares Core U.S. Aggregate Bond ETF	\$2.0	1.8%
12	BND Vanguard Total Bond Market ETF	\$1.9	1.7%
13	BTC Grayscale Bitcoin Mini Trust	\$1.8	NA
14	SPLG SPDR Portfolio S&P 500 ETF	\$1.7	4.4%
15	QQQM Invesco Nasdaq 100 ETF	\$1.7	5.8%
16	LQD iShares iBoxx \$ IG Corporate Bond ETF	\$1.7	5.5%
17	VCLT Vanguard Long-Term Corporate Bond ETF	\$1.5	15.9%
18	XLF Financial Select Sector SPDR Fund	\$1.5	3.9%
19	CGMU Capital Group Municipal Income ETF	\$1.3	170.3%
20	SMH VanEck Semiconductor ETF	\$1.3	6.0%

Source: National Bank of Canada, Bloomberg

Ticker	Name	Flow (\$B)	Flow/AUM
1	GBTC Grayscale Bitcoin Trust BTC	-\$2.2	-13.6%
2	VWO Vanguard FTSE Emerging Markets ETF	-\$1.2	-1.6%
3	BBEU JPMorgan BetaBuilders Europe ETF	-\$1.2	-15.0%
4	ACWI iShares MSCI ACWI ETF	-\$0.9	-4.8%
5	IWF iShares Russell 1000 Growth ETF	-\$0.9	-0.9%
6	MCHI iShares MSCI China ETF	-\$0.9	-15.8%
7	VONG Vanguard Russell 1000 Growth ETF	-\$0.8	-3.8%
8	VONV Vanguard Russell 1000 Value	-\$0.7	-7.5%
9	RSPT Invesco S&P 500 Equal Weight Technology ETF	-\$0.6	-13.9%
10	BBCA JPMorgan BetaBuilders Canada ETF	-\$0.6	-8.0%
11	SPYG SPDR Portfolio S&P 500 Growth ETF	-\$0.6	-1.9%
12	USFR WisdomTree Floating Rate Treasury Fund	-\$0.5	-3.0%
13	XLY Consumer Discretionary Select Sector SPDR	-\$0.5	-2.7%
14	KWEB KraneShares CSI China Internet ETF	-\$0.5	-9.4%
15	ASHR Xtrackers Harvest CSI 300 China A-Shares ETF	-\$0.5	-27.8%
16	XLC Communication Services Select Sector SPDR	-\$0.5	-2.5%
17	IEUR iShares Core MSCI Europe ETF	-\$0.4	-8.7%
18	HYG iShares iBoxx \$ High Yield Corporate Bond ETF	-\$0.4	-2.3%
19	COPX Global X Copper Miners ETF	-\$0.4	-14.5%
20	OMFL Invesco Russell 1000 Dynamic Multifactor ETF	-\$0.4	-6.1%

Source: National Bank of Canada, Bloomberg

Appendix 1: 2024 January - July ETF Flow Tables

Table 11 - Equity ETF Flows by Geography - YTD July 2024

Geography	AUM (\$B)	Mkt Shr	Flow (\$B)	Flow/AUM
U.S.	\$5,809		\$262.6	5.4%
Broad/Large Cap	\$2,616	36%	\$140.6	6.6%
U.S. Other	\$3,193	43%	\$122.0	4.5%
International Developed	\$742		\$37.4	5.7%
Broad Int'l Dev	\$579	8%	\$30.9	6.0%
Broad Europe	\$51	1%	\$2.1	4.7%
Japan	\$38	1%	\$3.9	13.1%
Canada	\$10	0%	-\$1.0	-9.8%
Other Developed	\$64	1%	\$1.5	2.7%
Emerging Markets	\$325		\$5.9	2.0%
Broad Cap Weighted	\$217	3%	\$4.4	2.2%
China (A+H)	\$17	0%	-\$3.6	-17.2%
Other EM	\$90	1%	\$5.1	6.4%
Global/Regional	\$465	6%	\$19.7	4.8%
Total Displayed	\$7,341	100%	\$325.7	5.2%

Source: National Bank of Canada, Bloomberg

Table 12 - Equity ETF Flows by Sector and Themes* - YTD July 2024

Sector	AUM (\$B)	Mkt Shr	Flow (\$B)	Flow/AUM
Technology	\$264	27%	\$16.4	7.7%
Industrials	\$48	5%	\$3.6	9.0%
Financials	\$75	8%	\$3.0	4.9%
Real Estate	\$78	8%	\$1.0	1.3%
Utilities	\$26	3%	\$0.8	3.5%
Materials	\$46	5%	-\$0.2	-0.5%
Consumer Discretionary	\$38	4%	-\$0.7	-1.9%
Consumer Staples	\$27	3%	-\$1.4	-5.2%
Communication Services	\$38	4%	-\$2.2	-6.4%
Health Care	\$100	10%	-\$2.7	-2.9%
Energy	\$83	8%	-\$3.2	-4.2%
ESG	\$91	9%	-\$3.4	-3.9%
Thematic	\$70	7%	-\$1.1	-1.6%
Total Displayed	\$983	100%	\$9.9	1.1%

*Includes all geographic focus; Source: National Bank of Canada, Bloomberg
QQQ is classified as a broad market ETF and does not belong to technology sector

Table 16 - Top Single Long ETF Inflows - YTD July 2024

Ticker	Name	Flow (\$B)	Flow/AUM
1	VOO Vanguard S&P 500 ETF	\$52.8	14.2%
2	IVV iShares Core S&P 500 ETF	\$37.4	9.4%
3	IBIT iShares Bitcoin Trust	\$20.0	NA
4	VTI Vanguard Total Stock Market ETF	\$18.4	5.3%
5	QQQ Invesco QQQ Trust Series 1	\$17.9	7.8%
6	AGG iShares Core U.S. Aggregate Bond ETF	\$12.4	12.3%
7	SPLG SPDR Portfolio S&P 500 ETF	\$11.3	43.8%
8	FBTC Fidelity Wise Origin Bitcoin Fund	\$10.0	NA
9	DYFN BlackRock U.S. Equity Factor Rotation ETF	\$9.2	18230.1%
10	VUG Vanguard Growth ETF	\$8.5	8.1%
11	QQQM Invesco Nasdaq 100 ETF	\$8.4	45.2%
12	GBTC Grayscale Bitcoin Trust BTC	\$7.9	NA
13	VGIT Vanguard Intermediate-Term Treasury ETF	\$7.6	35.0%
14	TLT iShares 20+ Year Treasury Bond ETF	\$7.5	14.5%
15	ETHE Grayscale Ethereum Trust	\$7.1	NA
16	IVW iShares S&P 500 Growth ETF	\$7.1	19.1%
17	BND Vanguard Total Bond Market ETF	\$6.7	6.4%
18	VXUS Vanguard Total International Stock ETF	\$6.6	10.4%
19	VEA Vanguard FTSE Developed Markets ETF	\$6.5	5.3%
20	IEFA iShares Core MSCI EAFE ETF	\$6.4	6.0%

Source: National Bank of Canada, Bloomberg

Table 13 - Fixed Income ETF Flows by Type - YTD July 2024

Type	AUM (\$B)	Mkt Shr	Flow (\$B)	Flow/AUM
U.S. Aggregate	\$410	24%	\$39.6	10.7%
U.S. Government	\$526	31%	\$37.6	7.7%
U.S. Municipals	\$124	7%	\$6.8	5.8%
U.S. I.G. Corporate	\$255	15%	\$23.7	10.3%
Developed Markets&Global	\$164	10%	\$19.4	13.5%
Emerging Markets	\$30	2%	\$0.2	0.7%
Sub-investment Grade	\$129	8%	\$27.0	26.8%
Convertibles and Preferreds	\$41	2%	\$1.0	2.6%
Total Displayed	\$1,681	100%	\$155.4	10.2%

Source: National Bank of Canada, Bloomberg

Table 14 - Fixed Income ETF Flows by Maturity - YTD July 2024

Maturity	AUM (\$B)	Mkt Shr	Flow (\$B)	Flow/AUM
Broad/Mixed	\$826	49%	\$76.5	10.2%
Ultra Short Term	\$243	14%	\$25.5	11.8%
Short Term	\$230	14%	-\$3.1	-1.4%
Mid Term	\$208	12%	\$25.4	14.0%
Long Term	\$120	7%	\$20.2	19.6%
Target Maturity	\$52	3%	\$10.6	25.4%
Rate Hedged	\$2	0%	\$0.4	28.0%
Total Displayed	\$1,681	100%	\$155.4	10.2%

Source: National Bank of Canada, Bloomberg

Table 15 - Equity ETF Flows by Factor* - YTD July 2024

Factor	AUM (\$B)	Mkt Shr	Flow (\$B)	Flow/AUM
Growth	\$567	23%	\$38.5	8.6%
Value	\$559	22%	\$22.6	4.6%
Small/Mid Cap	\$573	23%	\$18.0	3.6%
Quality	\$88	3%	\$11.2	16.8%
Momentum	\$29	1%	\$3.3	14.7%
Income	\$415	16%	\$2.5	0.7%
Low Vol	\$56	2%	-\$7.9	-13.4%
Multi-Factor and Other	\$230	9%	\$24.4	13.1%
Total Displayed	\$2,519	100%	\$112.4	5.2%

*Includes all geographic focus, excluding sector ETFs; Source: NBC, Bloomberg

Table 17 - Top Single Long ETF Outflows - YTD July 2024

Ticker	Name	Flow (\$B)	Flow/AUM
1	SPY SPDR S&P 500 ETF Trust	-\$11.6	-2.3%
2	USMV iShares MSCI USA Min Vol Factor ETF	-\$4.5	-17.1%
3	AMJ JPMorgan Alerian MLP Index ETN	-\$3.4	-111.8%
4	EFV iShares MSCI EAFE Value ETF	-\$3.3	-19.4%
5	TFLO iShares Treasury Floating Rate Bond ETF	-\$3.2	-30.6%
6	ACWI iShares MSCI ACWI ETF	-\$3.0	-15.5%
7	ESGU iShares ESG Aware MSCI USA ETF	-\$2.4	-18.2%
8	IWD iShares Russell 1000 Value ETF	-\$2.4	-4.4%
9	VGSH Vanguard Short-Term Treasury ETF	-\$2.4	-10.7%
10	HYG iShares iBoxx \$ High Yield Corporate Bond ETF	-\$2.3	-12.0%
11	SUSA iShares MSCI USA ESG Select ETF	-\$2.2	-41.9%
12	ARKK ARK Innovation ETF	-\$2.1	-23.2%
13	FVD First Trust Value Line Dividend Index Fund	-\$1.8	-17.0%
14	VWO Vanguard FTSE Emerging Markets ETF	-\$1.8	-2.4%
15	IWF iShares Russell 1000 Growth ETF	-\$1.8	-2.2%
16	GLD SPDR Gold Shares	-\$1.8	-3.0%
17	IEF iShares S&P 100 ETF	-\$1.7	-13.2%
18	SDY SPDR S&P Dividend ETF	-\$1.6	-7.9%
19	VCSH Vanguard Short-Term Corporate Bond ETF	-\$1.6	-4.5%
20	DVY iShares Select Dividend ETF	-\$1.6	-8.2%

Source: National Bank of Canada, Bloomberg

Table 18: ETF Provider Table

Provider	AUM (\$B)	Mkt Shr	July 2024		YTD July 2024	
			Flow (\$B)	Flow/AUM	Flow (\$B)	Flow/AUM
1 BlackRock iShares	\$2,981	31%	\$36.4	1.3%	\$144.6	5.6%
2 Vanguard	\$2,749	29%	\$28.7	1.1%	\$148.2	6.3%
3 State Street SSGA	\$1,378	14%	\$17.8	1.3%	\$14.6	1.2%
4 Invesco	\$563	6%	\$8.5	1.5%	\$49.8	10.9%
5 Charles Schwab	\$364	4%	\$2.7	0.8%	\$13.8	4.3%
6 First Trust	\$175	2%	\$1.8	1.1%	\$10.7	7.0%
7 JPMorgan	\$161	2%	\$0.7	0.4%	\$19.7	14.9%
8 Dimensional Holdings	\$152	2%	\$3.0	2.1%	\$21.5	18.3%
9 VanEck	\$84	1%	\$1.4	1.8%	\$6.1	9.0%
10 Fidelity	\$82	1%	\$3.6	4.7%	\$21.4	41.7%
11 WisdomTree	\$81	1%	-\$0.3	-0.4%	\$2.7	3.7%
12 ProShares	\$72	1%	\$0.2	0.3%	-\$7.4	-10.7%
13 American Century	\$51	1%	\$1.7	3.6%	\$9.5	25.9%
14 Global X	\$50	1%	\$0.1	0.1%	\$5.8	13.8%
15 Pacer Financial	\$47	0%	\$0.5	1.2%	\$8.6	24.6%
16 Direxion	\$46	0%	\$3.6	8.6%	\$0.7	1.9%
17 Capital Group	\$36	0%	\$4.4	14.2%	\$14.3	76.2%
18 Goldman Sachs	\$36	0%	\$0.2	0.7%	-\$0.2	-0.7%
19 PIMCO	\$28	0%	\$0.7	2.5%	\$4.3	18.0%
20 Grayscale	\$25	0%	\$7.9	47.6%	\$18.0	235052.7%
Top 20 Total	\$9,161	96%	\$123.6		\$506.7	
Total ETF	\$9,533	100%	\$132.9		\$570.4	

Source: NBF ETF Research, Bloomberg. Data as of July 31, 2024.

Table 19: ESG ETF Flows by Categories

Category	AUM (\$M)	AUM (%)	July 2024		YTD July 2024	
			Flow (\$M)	Flow/AUM	Flow (\$M)	Flow/AUM
Equity	\$93,877	90%	\$331	0.4%	-\$3,344	-3.8%
Broad - U.S.	\$45,767	44%	\$249	0.6%	-\$3,635	-8.4%
Broad - DM	\$10,316	10%	\$99	1.0%	\$242	2.6%
Broad - EM	\$4,846	5%	\$32	0.7%	\$30	0.7%
Broad - Global	\$4,715	5%	-\$20	-0.4%	\$119	2.7%
Environment	\$15,641	15%	-\$9	-0.1%	\$642	4.8%
Clean Energy	\$6,852	7%	-\$53	-0.8%	-\$821	-9.5%
Energy Transition	\$257	0%	\$8	3.1%	\$1	0.2%
Social	\$4,225	4%	\$30	0.7%	\$253	7.0%
Other	\$1,257	1%	-\$3	-0.3%	-\$175	-0.2%
Commodities	\$601	1%	\$7	1.1%	-\$96	-11.5%
Multi-Asset	\$67	0%	\$0	0.3%	-\$7	-9.8%
Fixed Income	\$10,207	10%	\$279	2.9%	\$334	3.4%
Total Displayed	\$104,751	100%	\$616	0.6%	-\$3,114	-3.1%

Source: NBF ETF Research, Bloomberg. Data as of July 31, 2024.

Appendix 2 - Glossary

Exchange Traded Funds (ETFs) are open-ended mutual funds in continuous distribution. This report also includes other Exchange Traded Products such as notes, grantor trusts, limited partnerships and unit investment trusts.

AUM (Assets Under Management): AUM is expressed in local currency, which is the U.S. dollar for the purpose of this report.

Market Share / AUM (%): AUM as % of category total AUM on the last line of the table.

Flow: The net dollar amount of fund creations and redemptions for the period based on daily NAV and the change in Shares Outstanding. Flows are expressed in local currency, which is the U.S. dollar for the purpose of this report.

Maturity: We categorize fixed income ETFs into the following maturity brackets:

- **Broad/Mixed:** ETF that holds issues from across more than one maturity bucket (short, mid and/or long-term).
- **Floating Rate:** ETF that mainly invests in floating rate issues with periodic interest rate resets.
- **Long-Term:** ETF that mainly invests in long-term issues and has a weighted average maturity greater than 10 years.
- **Mid-Term:** ETF that mainly invests in intermediate-term fixed issues and has a weighted average maturity between three and 10 years.
- **Short-Term:** ETF that mainly invests in short-term issues with weighted average maturity less than three years.
- **Target Maturity:** ETF that has a target maturity, such as a fixed date or year.
- **Rate Hedged:** ETF that uses derivatives to mitigate interest rate risk and to maintain a zero or negative portfolio duration.

NAV (Net Asset Value per share): ETF price is used when NAV is not available.

Flow/AUM (Flow as % AUM): Flow as a percentage of assets under management from the beginning of the period.

Defensive Sectors: We classify Consumer non-cyclicals, Energy, Health Care, Utilities as defensive sectors.

Cyclical Sectors: We classify Consumer Cyclical, Financials, Real Estate, Industrials, Information Technology, Materials, Communication Services as cyclical sectors.

All numbers are as of last month's final business day.

Appendix 3 - Equity ETF by Factor Categories

We group Factor Equity ETFs (exclude cap-weighted ETFs, sector ETFs, and thematic 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.

Small/Mid Cap: A fund with small/mid cap focus.

Income: A fund with the 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.

Value: A fund that invests primarily in the stocks that are considered undervalued using metrics such as price-to-earnings, price-to-book, EV/EBITDA, etc.

Growth: A fund that invests primarily in fast-growing stocks using metrics such as earnings growth, sales growth, momentum, etc.

Momentum: A fund that invests primarily in high momentum stocks using metrics such as period returns.

Quality: A fund that invests primarily in high quality stocks using metrics like ROE, debt/equity, and earnings growth.

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.

Other: Any non-cap weighted factor strategy that is not covered by otherwise defined categories. This includes equal-weight, multi-factor, AlphaDEX, and other fundamental-based ETFs.

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