

March 2022: Record Monthly Inflows for the Canadian Energy Sector

- Flow to Canadian ETFs accelerated with \$4.8 billion inflow in March, led by Canadian Equity and Bonds
- Canada-listed Energy sector ETFs recorded their best ever single month of inflow with \$541 million created
- The selloff in bond markets did not deter investors from buying Canadian aggregate bond ETFs
- 13 new ETFs listed in March, including three closed-end fund conversions by Middlefield

Summary: Canadian ETFs gathered \$4.8 billion in net flows in March, closing the first quarter with a whopping \$14 billion in flows, or 4% of their assets at the start of the year.

Equity is still leading the charge with \$2.5 billion created in March, over half of which went into Canadian equity ETFs, whereas broad developed and emerging market ETFs suffered redemptions. Canada was a clear leader in Q1, virtually doubling the inflows to each of U.S. and global equity ETF categories (Table 1). Despite the demand for equities, Low volatility factor and multi-factor ETFs suffered outflows.

Fixed Income surged back into demand in March, driven by creations in Canadian aggregate and U.S. bond ETFs. As rates rose precipitously in both Canada and the U.S. following hawkish central bank action, both short-term and long-term bond ETFs suffered outflows while broad/mid seemed to be a safer place to be. Zooming out to the first quarter, we observe that fixed income inflows were not evenly spread; riskier categories like Canadian corporate bond, foreign bond, and preferred share ETFs lost assets.

Contrary to the U.S. where Commodities ETFs are finally in demand as a possible inflation play, in Canada the category saw outflows of \$47 million in March, ending the quarter with \$284 million in redemptions.

Crypto-asset ETFs on the other hand enjoyed \$401 million inflows, their single largest net flow in the past four months on the back of bouncing prices in Bitcoin and Ethereum.

Flows by Asset Class, Category and Product: (Table 1 & Tables 5 - 12)

Demand for Equity ETFs was strong in March; inflows were broad-based across different strategies, not just in market-cap weighted ETFs. Sector ETFs had the highest inflow among all categories, with energy (XEG) and Financials (ZEB) leading the pack. XEG's single monthly inflow of \$332 million was the product's highest since its inception in 2001, an astonishing fact given its status as

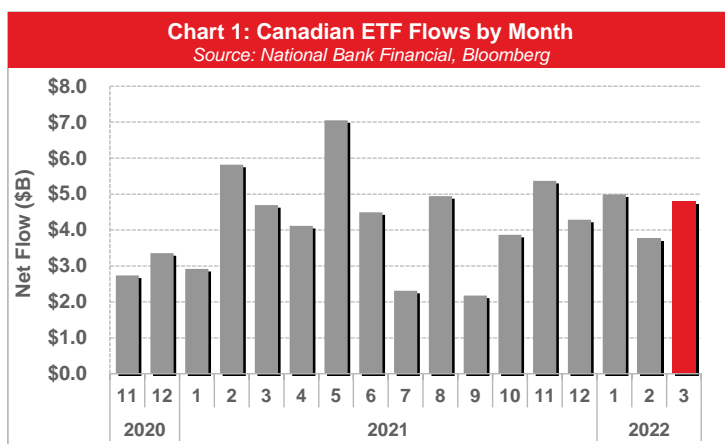
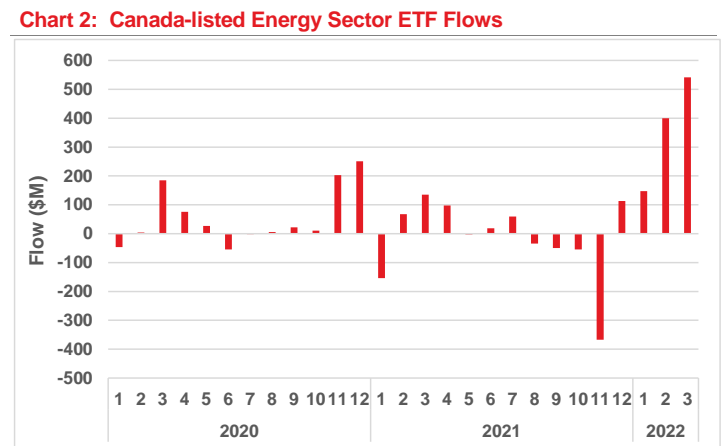


Table 1 - ETF Flows by Category - YTD March 2022

| | AUM (\$M) | Mkt Shr (%) | March 2022 | | YTD March 2022 | |
|-------------------|------------------|-------------|----------------|-------------|-----------------|-------------|
| | | | Flow \$M | Flow/AUM | Flow \$M | Flow/AUM |
| Equity | \$215,021 | | \$2,501 | 1.2% | \$10,372 | 4.6% |
| Canada | \$84,349 | 26% | \$1,341 | 1.7% | \$5,100 | 6.4% |
| United States | \$72,819 | 22% | \$502 | 0.7% | \$2,766 | 3.4% |
| International | \$57,853 | 18% | \$658 | 1.2% | \$2,505 | 3.9% |
| Fixed Income | \$85,540 | 26% | \$1,572 | 1.8% | \$1,845 | 1.9% |
| Commodities | \$1,726 | 1% | -\$47 | -2.7% | -\$284 | -14.9% |
| Multi-Asset | \$16,085 | 5% | \$235 | 1.5% | \$991 | 6.3% |
| Inverse / Levered | \$2,253 | 1% | \$127 | 6.0% | \$440 | 25.0% |
| Crypto-Asset | \$6,137 | 2% | \$401 | 7.7% | \$552 | 9.3% |
| Total | \$326,762 | 100% | \$4,790 | 1.5% | \$13,916 | 4.0% |

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



Source: NBF ETF Research, Bloomberg. Data as of March 31, 2022

one of the oldest sector ETFs in Canada. Coupled with other energy ETFs, the entire sector logged a record inflow of \$541 million (Chart 2) in March 2022. Broad Canadian Equity (HXT) was another favourite, with U.S. Equity (VFV, ZSP, QUU, HXS) and Global Equity (ZEA) a distant second and third place, respectively. Emerging Market ETF (ZEM), Low volatility ETFs (ZLU) and Multi-factor ETFs registered outflows.

Fixed Income ETFs pulled in net flows of \$1.6 billion, the largest monthly inflow this year. Canadian aggregate bond ETF (HBB, ZAG) enjoyed among the highest inflows among all categories with \$1.3 billion in new money, taking up 80% the inflows to fixed income in March. Canadian corporate bond (ZCS, ZCM), preferred share (ZPR), and long-term bond (ZFL) ETFs were on the outflow side.

Commodity ETFs saw a redemption of \$47 million led by gold bullion ETFs. In the **Multi-Asset category**, NBI liquid alternative ETF (NALT) showed up on the leaderboard with \$101 million inflows, its best month ever in terms of creations, whereas AGF anti-beta market neutral ETF (QBTL) bled assets in a single institutional-sized redemption of \$170 million.

Crypto-Asset ETF inflows have been sticky, “pausing” instead of reversing when crypto prices face one of their steep and frequent drawdowns. The up-swinging prices of both Bitcoin and Ethereum may have drawn inflows from “performance chasers” into this category. **BTCC/B** from Purpose and **BTCQ** from 3iQ both showed up on the top inflow leaderboard (Table 5, page 3).

| Provider | AUM (\$M) | Mkt Shr (%) | March 2022 | | YTD March 2022 | |
|-----------------------------|------------------|---------------|----------------|-------------|-----------------|-------------|
| | | | Flow (\$M) | Flow/AUM | Flow (\$M) | Flow/AUM |
| 1 RBC iShares | \$99,034 | 30.3% | \$507 | 1% | \$2,881 | 3% |
| 2 BMO | \$82,747 | 25.3% | \$1,427 | 2% | \$2,441 | 3% |
| 3 Vanguard | \$40,564 | 12.4% | \$642 | 2% | \$2,309 | 5% |
| 4 Horizons | \$22,445 | 6.9% | \$1,215 | 6% | \$2,645 | 13% |
| 5 CI First Asset | \$15,051 | 4.6% | -\$59 | 0% | -\$537 | -3% |
| 6 Mackenzie* | \$12,687 | 3.9% | \$97 | 1% | \$881 | 7% |
| 7 TDAM | \$8,193 | 2.5% | -\$64 | -1% | \$405 | 5% |
| 8 Purpose | \$6,570 | 2.0% | \$317 | 5% | \$675 | 11% |
| 9 National Bank Investments | \$5,210 | 1.6% | \$278 | 6% | \$546 | 11% |
| 10 Invesco | \$4,586 | 1.4% | \$37 | 1% | \$112 | 2% |
| 11 CIBC | \$2,897 | 0.9% | \$26 | 1% | -\$41 | -1% |
| 12 Fidelity | \$2,813 | 0.9% | \$122 | 5% | \$257 | 9% |
| 13 Dynamic | \$2,522 | 0.8% | -\$14 | -1% | -\$53 | -2% |
| 14 Manulife | \$2,504 | 0.8% | \$29 | 1% | \$75 | 3% |
| 15 Harvest | \$2,180 | 0.7% | \$151 | 8% | \$288 | 15% |
| 16 PIMCO | \$1,974 | 0.6% | -\$69 | -3% | -\$45 | -2% |
| 17 Desjardins | \$1,973 | 0.6% | -\$42 | -2% | -\$46 | -2% |
| 18 Evolve Funds | \$1,699 | 0.5% | \$48 | 3% | \$82 | 4% |
| 19 3iQ | \$1,598 | 0.5% | \$95 | 7% | \$92 | 6% |
| 20 Franklin Templeton | \$1,597 | 0.5% | -\$229 | -13% | -\$477 | -22% |
| 21 Hamilton | \$1,539 | 0.5% | \$123 | 9% | \$378 | 33% |
| 22 AGF | \$1,250 | 0.4% | -\$170 | -12% | -\$84 | -6% |
| 23 Scotia Bank | \$1,101 | 0.3% | \$63 | 6% | \$279 | 32% |
| 24 Ninepoint Partners | \$997 | 0.3% | \$151 | 18% | \$582 | 182% |
| 25 Brompton Funds | \$567 | 0.2% | \$9 | 2% | \$26 | 4% |
| 26 Picton Mahoney | \$531 | 0.2% | \$17 | 3% | \$52 | 11% |
| 27 First Trust | \$461 | 0.1% | -\$7 | -2% | \$49 | 11% |
| 28 Bristol Gate | \$320 | 0.1% | \$3 | 1% | \$5 | 1% |
| 29 Middlefield | \$272 | 0.1% | -\$11 | -23% | -\$12 | -23% |
| 30 Guardian Capital | \$233 | 0.1% | \$78 | 50% | \$103 | 70% |
| 31 Emerge | \$154 | 0.0% | -\$2 | -1% | -\$3 | -2% |
| 32 IA Clarington | \$137 | 0.0% | -\$3 | -2% | \$2 | 1% |
| 33 Lysander | \$96 | 0.0% | \$0 | -1% | -\$2 | -2% |
| 34 Accelerate | \$68 | 0.0% | \$6 | 9% | \$10 | 15% |
| 35 Russell Investments | \$52 | 0.0% | \$0 | 0% | \$1 | 1% |
| 36 Starlight | \$38 | 0.0% | \$0 | 0% | \$0 | -1% |
| 37 Arrow Capital | \$34 | 0.0% | \$1 | 2% | \$11 | 47% |
| 38 SmartBe | \$26 | 0.0% | \$1 | 5% | -\$3 | -11% |
| 39 Mulvihill | \$17 | 0.0% | \$17 | 1686% | \$18 | NA |
| 40 Evermore Capital | \$11 | 0.0% | \$3 | 37% | \$11 | NA |
| 41 NCM Investments | \$6 | 0.0% | \$0 | 0% | \$0 | 0% |
| 42 Caldwell | \$5 | 0.0% | \$0 | 0% | \$5 | NA |
| Total | \$326,762 | 100.0% | \$4,790 | 1.5% | \$13,916 | 4.0% |

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

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

BMO and Horizons logged the highest provider inflows in March. Outside the top 10 ETF providers, ETF asset growth has broadened out to smaller issuers and new entrants, with Ninepoint, Guardian Capital, Evermore, and Mulvihill all enjoying sizable inflows in either absolute dollar or percentage terms.

In March 2022, the Canadian ETF landscape welcomed 13 new launches. Sector products were a focal point, with energy coming back into popularity. Evolve rounded out its FANGMA index ETF with a leveraged (1.25x monthly) version. Middlefield converted three mutual funds to ETFs.

| Name | Ticker | Mgmt Fee (%) | Focus |
|--|--------|--------------|---------------------|
| 1 CI Energy Giants Covered Call ETF | NXF/U | 0.65 | Sector Covered Call |
| 2 CI Health Care Giants Covered Call ETF | FHI/U | 0.65 | Sector Covered Call |
| 3 CI Gold+ Giants Covered Call ETF | CGXF/U | 0.65 | Sector Covered Call |
| 4 CI Tech Giants Covered Call ETF | TXF/U | 0.65 | Sector Covered Call |
| 5 BMO Brookfield Global Real Estate Tech Fund | TOWR | 0.80 | Real Estate |
| 6 BMO Brookfield Global Renewables Infrastructure | GRNI | 0.80 | Infrastructure |
| 7 Ninepoint Energy Income Fund | NRGI | 1.50 | Energy |
| 8 Evolve Enhanced FANGMA Index ETF | TECE/B | 0.50 | Leveraged FANGMA |
| 9 Evolve Enhanced FANGMA Index ETF | TECE/U | 0.50 | Leveraged FANGMA |
| 10 Evolve Enhanced FANGMA Index ETF | TECE | 0.50 | Leveraged FANGMA |
| 11 Middlefield Innovation Dividend ETF | MINN | 0.90 | Global Equity |
| 12 Middlefield Sustainable Global Dividend ETF | MDIV | 0.85 | Global Equity |
| 13 Middlefield Sustainable Infrastructure Dividend ETF | MINF | 1.25 | Global Equity |

Source: NBF, SEDAR, ETF Providers

Canadian ESG ETF Flows (Table 4): Canadian listed ESG ETF inflows were \$391 million in March, bringing the total Q1 inflows figure to \$997 million. This near \$1 billion haul continues the record pace of asset gathering in 2021, when ESG ETFs pulled in more than \$4 billion in Canada. In March, a single ESG ETF dominated the inflows to the category: BMO MSCI ESG Leaders Index ETF (ESGY) took in \$317 million from several large block trades, likely from institutional subscriptions. Other ETFs on the March's ESG inflows league table include clean energy ETFs and broad score-based ESG ETFs. Clean energy ETFs continued to gain in both prices and inflows, riding the tailwind of Europe's stronger commitment toward renewables motivated by Russia's invasion of Ukraine.

Table 4: Canada Listed ESG ETFs - March 2022

| Category | AUM (\$M) | AUM (%) | Flow (\$M) | Flow/AUM |
|------------------------|----------------|-------------|--------------|-------------|
| Equity | \$8,279.4 | 86% | \$385 | 4.9% |
| Broad - Canada | \$1,589.6 | 16% | -\$1 | -0.1% |
| Broad - U.S. | \$2,413.2 | 25% | \$341 | 16.9% |
| Broad - DM | \$1,288.4 | 13% | \$34 | 2.6% |
| Broad - EM | \$132.9 | 1% | \$1 | 0.7% |
| Broad - Global | \$1,283.5 | 13% | \$3 | 0.3% |
| Environment | \$1,080.9 | 11% | -\$29 | -2.7% |
| Clean Energy | \$191.2 | 2% | \$19 | 11.3% |
| Social | \$179.7 | 2% | -\$5 | -2.4% |
| Infrastructure | \$120.0 | 1% | \$23 | 23.8% |
| Commodities | \$6.6 | 0% | \$0 | 0.0% |
| Multi-Asset | \$154.9 | 2% | \$4 | 2.8% |
| Fixed Income | \$1,217.1 | 13% | \$2 | 0.1% |
| Total Displayed | \$9,651 | 100% | \$391 | 4.3% |

Source: NBF ETF Research, Bloomberg. Data as of March 31, 2022

Note: the tables below all use the "new" flows calculation methodology.

Table 5 - Top Single Long ETF Inflows - March 2022

| Rank | Ticker | Name | Flow (\$M) | Flow/AUM |
|------|--------|---|------------|----------|
| 1 | HBB | Horizons Cdn Select Universe Bond ETF | \$649 | 67% |
| 2 | ZAG | BMO Aggregate Bond Index ETF | \$498 | 8% |
| 3 | ZMU | BMO Mid-Term US IG Corporate Bond Hedged to CAD Index ETF | \$498 | 28% |
| 4 | HXT | Horizon S&P/TSX 60 Index ETF | \$489 | 15% |
| 5 | XEG | iShares S&P/TSX Capped Energy Index ETF | \$332 | 20% |
| 6 | ESGY | BMO MSCI USA ESG Leaders Index ETF | \$317 | 21% |
| 7 | ZJPN | BMO Japan Index ETF | \$297 | NA |
| 8 | BTCC/B | Purpose Bitcoin ETF | \$294 | 46% |
| 9 | ZEQ | BMO MSCI Europe High Quality Hedged To CAD Index ETF | \$292 | 61% |
| 10 | ZHY | BMO High Yield US Corporate Bond Hedged to CAD Index ETF | \$254 | 41% |
| 11 | QUU | Mackenzie US Large Cap Equity Index ETF | \$199 | 9% |
| 12 | VFV | Vanguard S&P 500 Index ETF | \$180 | 3% |
| 13 | ZEB | BMO Equal Weight Banks Index ETF | \$172 | 9% |
| 14 | ZEA | BMO MSCI EAFE Index ETF | \$149 | 3% |
| 15 | ZUS/U | BMO Ultra Short-Term US Bond ETF | \$139 | 115% |
| 16 | CLG | iShares 1-10 Year Laddered Government Bond Index ETF | \$132 | 38% |
| 17 | ZCPB | BMO Core Plus Bond Fund ETF | \$128 | 10% |
| 18 | NINT | NBI Active International Equity ETF | \$115 | 104% |
| 19 | NALT | NBI Liquid Alternatives ETF | \$101 | 95% |
| 20 | BTCQ | 3iQ CoinShares Bitcoin ETF | \$97 | 9% |

Source: National Bank of Canada, Bloomberg;

Table 6 - Top Single Long ETF Outflows - March 2022

| Rank | Ticker | Name | Flow (\$M) | Flow/AUM |
|------|--------|---|------------|----------|
| 1 | ZEM | BMO MSCI Emerging Markets Index ETF | -\$399 | -20% |
| 2 | ZFL | BMO Long Federal Bond Index ETF | -\$265 | -11% |
| 3 | XSB | iShares Core Canadian Short Term Bond Index ETF | -\$238 | -7% |
| 4 | ZCS | BMO Short Corporate Bond Index ETF | -\$192 | -12% |
| 5 | QBTL | AGFIQ US Market Neutral Anti-Beta CAD-Hedged ETF | -\$170 | -42% |
| 6 | XEF | iShares Core MSCI EAFE IMI Index ETF | -\$157 | -4% |
| 7 | ZLUB | BMO Low Volatility US Equity ETF | -\$157 | -10% |
| 8 | ZCM | BMO Mid Corporate Bond Index ETF | -\$151 | -16% |
| 9 | TPU | TD US Equity Index ETF | -\$149 | -10% |
| 10 | ZPR | BMO Laddered Preferred Share Index ETF | -\$138 | -6% |
| 11 | ZDM | BMO MSCI EAFE Hedged to CAD Index ETF | -\$128 | -17% |
| 12 | CGXF | CI Gold+ Giants Covered Call ETF | -\$128 | -30% |
| 13 | XFN | iShares S&P/TSX Capped Financials Index ETF | -\$117 | -7% |
| 14 | BTCC/U | Purpose Bitcoin ETF | -\$116 | -14% |
| 15 | ZSP | BMO S&P 500 Index ETF | -\$102 | -1% |
| 16 | ZDH | BMO International Dividend Hedged to CAD ETF | -\$93 | -47% |
| 17 | ZXMB | CI Morningstar International Momentum Index ETF | -\$92 | -40% |
| 18 | VUS | Vanguard US Total Market Index ETF CAD Hedged | -\$86 | -8% |
| 19 | ZWE | BMO Europe High Dividend Covered Call Hedged to CAD ETF | -\$83 | -11% |
| 20 | FLAM | Franklin FTSE US Index ETF | -\$81 | -18% |

Source: National Bank of Canada, Bloomberg;

Table 7 - ETF Flows by Category - March 2022

| Asset Class | AUM (\$M) | Mkt Shr | Flow (\$M) | Flow/AUM |
|-------------------|------------------|-------------|----------------|-------------|
| Equity | \$215,021 | 66% | \$2,501 | 1.2% |
| Fixed Income | \$85,540 | 26% | \$1,572 | 1.8% |
| Commodities | \$1,726 | 1% | -\$47 | -2.7% |
| Multi-Asset | \$16,085 | 5% | \$235 | 1.5% |
| Inverse / Levered | \$2,253 | 1% | \$127 | 6.0% |
| Crypto-Asset | \$6,137 | 2% | \$401 | 7.7% |
| Total | \$326,762 | 100% | \$4,790 | 1.5% |

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

Table 8 - Equity ETF Flows by Geography - March 2022

| Geography | AUM (\$M) | Mkt Shr | Flow (\$M) | Flow/AUM |
|------------------------|------------------|-------------|----------------|-------------|
| Canada | \$84,349 | 39% | \$1,341 | 1.7% |
| United States | \$72,819 | 34% | \$502 | 0.7% |
| DM: Broad | \$21,355 | 10% | -\$97 | -0.4% |
| DM: Regional & Country | \$6,449 | 3% | \$598 | 10.2% |
| Emerging Markets | \$5,657 | 3% | -\$332 | -5.3% |
| Global | \$24,392 | 11% | \$490 | 2.1% |
| Total | \$215,021 | 100% | \$2,501 | 1.2% |

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

Table 9 - Equity ETF Flows by Sector* - March 2022

| Sector | AUM (\$M) | Mkt Shr | Flow (\$M) | Flow/AUM |
|--------------|-----------------|-------------|--------------|-------------|
| Financials | \$10,796 | 36% | \$132 | 1.2% |
| Energy | \$4,028 | 13% | \$541 | 16.4% |
| Real Estate | \$3,766 | 12% | -\$58 | -1.6% |
| Technology | \$3,023 | 10% | \$45 | 1.5% |
| Materials | \$2,784 | 9% | -\$95 | -3.6% |
| Health Care | \$2,538 | 8% | \$43 | 1.8% |
| Utilities | \$2,481 | 8% | -\$17 | -0.7% |
| Other | \$959 | 3% | \$23 | 3.9% |
| Total | \$30,375 | 100% | \$613 | 2.0% |

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

Table 10 - Equity ETF Flows by Focus - March 2022

| Focus | AUM (\$M) | Mkt Shr | Flow (\$M) | Flow/AUM |
|----------------------|------------------|-------------|----------------|-------------|
| Cap-weighted | \$127,302 | 59% | \$619 | 0.5% |
| Dividend / Income | \$22,865 | 11% | \$351 | 1.6% |
| Factor: Low Vol | \$8,245 | 4% | -\$203 | -2.5% |
| Factor: Multi-factor | \$3,782 | 2% | -\$55 | -1.5% |
| Factor: Fundamental | \$5,547 | 3% | \$422 | 8.3% |
| Sector | \$30,375 | 14% | \$613 | 2.1% |
| Thematic | \$10,790 | 5% | \$473 | 4.7% |
| Other | \$6,116 | 3% | \$282 | 4.9% |
| Total | \$215,021 | 100% | \$2,501 | 1.2% |

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

Table 11 - Fixed Income ETF Flows by Type - March 2022

| Type | AUM (\$M) | Mkt Shr | Flow (\$M) | Flow/AUM |
|-----------------------|-----------------|-------------|----------------|-------------|
| Canada Aggregate | \$25,477 | 30% | \$1,334 | 5.4% |
| Canada Government | \$8,882 | 10% | -\$138 | -1.5% |
| Canada Corporate | \$13,325 | 16% | -\$383 | -2.7% |
| U.S. / North America | \$7,421 | 9% | \$625 | 8.9% |
| Foreign | \$10,263 | 12% | -\$32 | -0.3% |
| Sub-Investment Grade | \$4,445 | 5% | \$178 | 4.1% |
| Preferred/Convertible | \$8,798 | 10% | -\$205 | -2.3% |
| Cash Alternative | \$6,930 | 8% | \$193 | 2.9% |
| Total | \$85,540 | 100% | \$1,572 | 1.8% |

Source: National Bank of Canada, Bloomberg

Table 12 - Fixed Income ETF Flows by Maturity - March 2022

| Maturity | AUM (\$M) | Mkt Shr | Flow (\$M) | Flow/AUM |
|------------------|-----------------|-------------|----------------|-------------|
| Broad/Mixed | \$45,168 | 53% | \$1,532 | 3.4% |
| Ultra Short Term | \$4,420 | 5% | \$193 | 4.5% |
| Short Term | \$18,320 | 21% | -\$726 | -3.7% |
| Mid Term | \$4,787 | 6% | \$502 | 11.2% |
| Long Term | \$4,117 | 5% | -\$179 | -4.0% |
| Real Return | \$1,700 | 2% | \$42 | 2.5% |
| Target Maturity | \$98 | 0% | \$15 | 17.2% |
| Cash Alternative | \$6,930 | 8% | \$193 | 2.9% |
| Total | \$85,540 | 100% | \$1,572 | 1.8% |

Source: National Bank of Canada, Bloomberg

YTD March Flow (Table 13 - 20):

Canadian ETFs welcomed \$14 billion year-to-date, of which a whopping \$10 billion went to Equity. In contrast to the flow pattern south of the border, commodity is the only asset class that bled assets with outflows of \$284 million. Canadian equity ETF flows have outpaced their U.S. and international counterparts year-to-date, taking up close to 50% of total Equity inflows. Market cap-weighted ETFs dominate the equity story with \$6.6 billion in flows, a mainstay feature of the ETF landscape given their liquidity and low cost. Energy sector ETFs contributed another \$1 billion in 2022 so far. Inflows to Fundamental equity have been strong; so have they been to Thematic ETFs, though they have come down from the frenzied demand peak from the previous year. ESG and agriculture (COW) ETFs have made recent inroads in the mindshare of investors. Quality and value factors were in strong demand, whereas low volatility and multi-factor ETFs lost favor.

Within Fixed Income, Canada aggregate bond, U.S./North America bond, and cash alternative ETF category almost equally split the \$1.8 billion inflow into bond ETFs. Short-term ETFs, preferred share ETFs, and foreign bond ETFs suffered outflows.

March 2022: Record Monthly Inflows for the Canadian Energy Sector

April 4, 2022

Table 13 - Top ETF Inflows - YTD March 2022

| Ticker | Name | Flow (\$M) | Flow/AUM |
|--------|---|------------|----------|
| 1 | XIU iShares S&P/TSX 60 Index ETF | \$1,719 | 16% |
| 2 | ESGY BMO MSCI USA ESG Leaders Index ETF | \$1,068 | 117% |
| 3 | HXT Horizon S&P/TSX 60 Index ETF | \$906 | 31% |
| 4 | ZEA BMO MSCI EAFE Index ETF | \$674 | 12% |
| 5 | VFV Vanguard S&P 500 Index ETF | \$633 | 10% |
| 6 | HSVA Horizons Cash Maximizer ETF | \$550 | 36% |
| 7 | TCLB TD Canadian Long Term Federal Bond ETF | \$534 | 182% |
| 8 | ZEP BMO S&P 500 Index ETF | \$514 | 5% |
| 9 | ZMU BMO Mid-Term US IG Corporate Bond Hedged to CAD Index ETF | \$503 | 27% |
| 10 | ZAG BMO Aggregate Bond Index ETF | \$500 | 8% |
| 11 | NNRG Ninepoint Energy Fund - ETF | \$500 | 256% |
| 12 | QCN Mackenzie Canadian Equity Index ETF | \$493 | 64% |
| 13 | XEG iShares S&P/TSX Capped Energy Index ETF | \$424 | 34% |
| 14 | VEQT Vanguard All-Equity ETF Portfolio | \$349 | 20% |
| 15 | ZEQ BMO MSCI Europe High Quality Hedged To CAD Index ETF | \$326 | 66% |
| 16 | BTCC/B Purpose Bitcoin ETF | \$316 | 47% |
| 17 | QUU Mackenzie US Large Cap Equity Index ETF | \$305 | 14% |
| 18 | HXS Horizons S&P 500 Index ETF | \$304 | 9% |
| 19 | ZJPN BMO Japan Index ETF | \$301 | NA |
| 20 | VGRO Vanguard Growth ETF Portfolio | \$284 | 9% |

Source: National Bank of Canada, Bloomberg;

Table 14 - Top ETF Outflows - YTD March 2022

| Ticker | Name | Flow (\$M) | Flow/AUM |
|--------|---|------------|----------|
| 1 | ESGY/F BMO MSCI USA ESG Leaders Index ETF | -\$764 | -93% |
| 2 | TEC TD Global Technology Leaders Index ETF | -\$450 | -21% |
| 3 | XEF iShares Core MSCI EAFE IMI Index ETF | -\$368 | -6% |
| 4 | XSH iShares Core Canadian Short Term Corporate Bond Index ETF | -\$363 | -19% |
| 5 | ZEM BMO MSCI Emerging Markets Index ETF | -\$358 | -17% |
| 6 | ZLU BMO Low Volatility US Equity ETF | -\$287 | -16% |
| 7 | VALT/U CI Gold Bullion Fund | -\$285 | -82% |
| 8 | XFN iShares S&P/TSX Capped Financials Index ETF | -\$261 | -15% |
| 9 | CGXF CI Gold+ Giants Covered Call ETF | -\$215 | -45% |
| 10 | FLGA Franklin Liberty Global Aggregate Bond ETF Cad-Hedged | -\$213 | -31% |
| 11 | ZCM BMO Mid Corporate Bond Index ETF | -\$196 | -19% |
| 12 | ZMP BMO Mid Provincial Bond Index ETF | -\$194 | -26% |
| 13 | ZGB BMO Government Bond Index ETF | -\$184 | -20% |
| 14 | ZFL BMO Long Federal Bond Index ETF | -\$162 | -6% |
| 15 | XRE iShares S&P/TSX Capped REIT Index ETF | -\$149 | -10% |
| 16 | CMUE CIBC Multifactor US Equity ETF | -\$127 | -35% |
| 17 | XSB iShares Core Canadian Short Term Bond Index ETF | -\$113 | -3% |
| 18 | ZLB BMO Low Volatility Canadian Equity ETF | -\$112 | -4% |
| 19 | XBB iShares Core Canadian Universe Bond Index ETF | -\$109 | -2% |
| 20 | ZWA BMO Covered Call Dow Jones Industrial Average CAD Hedged | -\$103 | -31% |

Source: National Bank of Canada, Bloomberg

Table 15 - ETF Flows by Category - YTD March 2022

| Asset Class | AUM (\$M) | Mkt Shr | Flow (\$M) | Flow/AUM |
|---------------------|------------------|-------------|-----------------|-------------|
| Equity | \$215,021 | 66% | \$10,372 | 5% |
| Fixed Income | \$85,540 | 26% | \$1,845 | 2% |
| Commodities | \$1,726 | 1% | -\$284 | -15% |
| Multi-Asset | \$16,085 | 5% | \$991 | 6% |
| Inverse / Leveraged | \$2,253 | 1% | \$440 | 25% |
| Crypto-Asset | \$6,137 | 2% | \$552 | 9% |
| Total | \$326,762 | 100% | \$13,916 | 4.0% |

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

Table 18 - Equity ETF Flows by Focus - YTD March 2022

| Focus | AUM (\$M) | Mkt Shr | Flow (\$M) | Flow/AUM |
|----------------------|------------------|-------------|-----------------|-------------|
| Cap-weighted | \$127,302 | 59% | \$6,632 | 5% |
| Dividend / Income | \$22,865 | 11% | \$1,129 | 5% |
| Factor: Low Vol | \$8,245 | 4% | -\$484 | -5% |
| Factor: Multi-factor | \$3,782 | 2% | -\$378 | -9% |
| Factor: Fundamental | \$5,547 | 3% | \$655 | 13% |
| Sector | \$30,375 | 14% | \$978 | 3% |
| Thematic | \$10,790 | 5% | \$841 | 8% |
| Other | \$6,116 | 3% | \$999 | 19% |
| Total | \$215,021 | 100% | \$10,372 | 4.6% |

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

Table 16 - Equity ETF Flows by Geography - YTD March 2022

| Geography | AUM (\$M) | Mkt Shr | Flow (\$M) | Flow/AUM |
|------------------------|------------------|-------------|-----------------|-------------|
| Canada | \$84,349 | 39% | \$5,100 | 6% |
| United States | \$72,819 | 34% | \$2,766 | 3% |
| DM: Broad | \$21,355 | 10% | \$803 | 3% |
| DM: Regional & Country | \$6,449 | 3% | \$715 | 10% |
| Emerging Markets | \$5,657 | 3% | -\$211 | -3% |
| Global | \$24,392 | 11% | \$1,198 | 5% |
| Total | \$215,021 | 100% | \$10,372 | 4.6% |

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

Table 19 - Fixed Income ETF Flows by Type - YTD March 2022

| Type | AUM (\$M) | Mkt Shr | Flow (\$M) | Flow/AUM |
|-----------------------|-----------------|-------------|----------------|-------------|
| Canada Aggregate | \$25,477 | 30% | \$814 | 3% |
| Canada Government | \$8,882 | 10% | \$74 | 1% |
| Canada Corporate | \$13,325 | 16% | -\$440 | -3% |
| U.S. / North America | \$7,421 | 9% | \$659 | 7% |
| Foreign | \$10,263 | 12% | -\$121 | -1% |
| Sub-Investment Grade | \$4,445 | 5% | \$218 | 4% |
| Preferred/Convertible | \$8,798 | 10% | -\$138 | -1% |
| Cash Alternative | \$6,930 | 8% | \$780 | 12% |
| Total | \$85,540 | 100% | \$1,845 | 1.9% |

Source: National Bank of Canada, Bloomberg

Table 17 - Equity ETF Flows by Sector* - YTD March 2022

| Sector | AUM (\$M) | Mkt Shr | Flow (\$M) | Flow/AUM |
|--------------|-----------------|-------------|--------------|-----------|
| Financials | \$10,796 | 36% | \$133 | 1% |
| Energy | \$4,033 | 13% | \$1,093 | 50% |
| Real Estate | \$3,766 | 12% | -\$117 | -3% |
| Technology | \$3,023 | 10% | -\$247 | -7% |
| Materials | \$2,784 | 9% | -\$154 | -6% |
| Health Care | \$2,538 | 8% | \$169 | 7% |
| Utilities | \$2,481 | 8% | \$76 | 3% |
| Other | \$954 | 3% | \$25 | 4% |
| Total | \$30,375 | 100% | \$978 | 3% |

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

Table 20 - Fixed Income ETF Flows by Maturity - YTD March 2022

| Maturity | AUM (\$M) | Mkt Shr | Flow (\$M) | Flow/AUM |
|------------------|-----------------|-------------|----------------|-------------|
| Broad/Mixed | \$45,168 | 53% | \$657 | 1% |
| Ultra Short Term | \$4,420 | 5% | \$292 | 7% |
| Short Term | \$18,320 | 21% | -\$523 | -3% |
| Mid Term | \$4,787 | 6% | \$239 | 3% |
| Long Term | \$4,117 | 5% | \$345 | 8% |
| Real Return | \$1,700 | 2% | \$35 | 2% |
| Target Maturity | \$98 | 0% | \$20 | 6% |
| Cash Alternative | \$6,930 | 8% | \$780 | 12% |
| Total | \$85,540 | 100% | \$1,845 | 1.9% |

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 2020 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 & behaviour, 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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