cetfa

Canadian ETF Association

Guide to the Canadian ETF Industry

A Road Map

FOURTH EDITION | SUMMER 2023

TABLE OF CONTENTS

PLANNED UPDATES

The story of Canadian ETFs naturally includes financial performance and statistics, as well as information related to regulatory standards, that change over time. To ensure the Guide presents information that is as accurate and current as possible, the CETFA aims to update the data and regulatory content as warranted semi-annually, as feasible, and based on input from our members/committees about their priorities.

FIGURE SOURCES

PUBLICATION INFORMATION

The Canadian ETF Industry: *An Introduction*

Welcome to CETFA's comprehensive (yet compact) Guide to The Canadian ETF Industry – *A Road Map*.

This guide was created by the Canadian ETF Association (CETFA) to provide financial professionals (in Canada and abroad), as well as investors, with a useful overview of a quickly growing sector. It is an industry that celebrated 30 years of operation in Canada in 2020, following the launch of the world's first ETF (TIPS 35) on the TSX on March 9, 1990.

Through *A Road Map*, you will learn about an increasingly influential investment product that a growing number of Canadians continue to turn to for building wealth and generating income. It will provide you with technical information (about how ETFs operate, taxes, legal considerations, etc.) and an understanding of the infrastructure (i.e., the "players") who make it all work.

In creating and updating this guide, the CETFA has drawn on subject matter expertise and editorial support from its members and trusted external parties whose contributions I want to acknowledge here. It will not, of course, be the final word on a product or sector that is dynamic and evolving. The first edition of this guide appeared in winter 2021 as health authorities worldwide were striving to bring COVID-19 under control and financial institutions were addressing its impact on economies and global financial markets. How many more performance "tests" have we overcome since then. What remains true throughout an extraordinarily challenging period for capital markets is that ETFs have continued to function effectively as they have throughout other upheavals. We are confident they will also meet the many financial, economic and geopolitical tests that continue to affect the world. If any statement can be made about ETFs with real confidence it's this: *ETFs are here to stay*.

On behalf of CETFA members, I want to thank you for investing your time in reviewing this guide. Your comments and questions about its contents are welcomed. If you want to know more about the Canadian ETF Industry and ETFs, please see Conclusions: Next Steps or visit the CETFA website (cetfa.ca) for current information.

Sincerely,

Pat Dunwoody
Executive Director
Canadian ETF Association

Canadian ETF History: *How They Began*

Most Canadians (and others) generally recognize specific innovations that originated in Canada.

These include the Canadarm (used on the International Space Station), insulin (to treat people with diabetes) and the snowmobile (invented by Joseph-Armand Bombardier), to name a few.[1]

But how many know that a widely embraced financial product, which held $US 9.23 trillion worldwide at the end of 2022,[2] emerged from Canada?

On March 9, 1990, a new type of fund was listed on the Toronto Stock Exchange (TSX): Toronto 35 Index Participation Units (TIPs). Depending on how you parse financial history, TIPs were either the world's first exchange traded funds (ETFs) or their direct precursor (the CETFA and international investing experts deem them to be the *first* ETFs to launch worldwide).[3] Without question, TIPs validated the ETF concept. Today – more than three decades later – that original fund (now iShares S&P/TSX 60 Index ETF) is still operating.[4]

To quote the Globe and Mail: "The success of that first ETF in Canada helped spawn a global industry that now numbers thousands of funds worldwide, giving investors access to emerging market stocks, gold, corporate bonds and just about every other asset class you can think of."[5]

A Canadian Concept is Welcomed by the United States

Three years after TIPs proved their merit, ETFs found favour in the United States.

Following the 1987 market crash, "institutional investors discovered…they had a need to trade large amounts of stock quickly, and preferably on an intraday basis."[6] Ultimately, American investment professionals found their inspiration in TIPs: "On the heels of this product's success, the concept of an exchange traded fund was revived in the US."[7]

[1] Wikipedia, List of Canadian Inventions. Last modified Feb. 28, 2022, 17:09 (UTC). bit.ly/3J3wWBY.
[2] ETFGI reports the global ETF industry gathered US$856 billion in net inflows in 2022, ETFGI.com news release, Jan. 12, 2023. https://bit.ly/3JUr5lu.
[3] "Exchange Traded Funds: History, Trading and Research," Laurent Deville, C. Zopounidis, M. Doumpos, P. Pardalos. Handbook of Financial Engineering, Springer, pp.1-37, 2008. HAL ID: halshs00162223, p. 4. bit.ly/3CAK3IG.
[4] ETFs celebrate Canadian roots: TIPs were first listed on the Toronto Stock Exchange 25 years ago, Investment Executive, March 9, 2015 09:45, Tessie Sanci. bit.ly/35KQ5dD.
[5] Great Canadian Innovations: The Canadian investment idea that busted a mutual-fund monopoly, The Globe and Mail, Published February 19, 2017; updated April 14, 2017, David Berman, Investment Reporter. tgam.ca/3KthfEu.
[6] The History of Exchange traded Funds (ETFs), Morningstar U.K., February 14, 2012, Lee Davidson. bit.ly/3J1it9D.
[7] Ibid.

Another ETF milestone came from a failed pitch, but constructive dialogue, between Nathan ("Nate") Most of the American Stock Exchange (Amex) and investing luminary, John Bogle. Bogle, declares Barron's, "indirectly created ETFs even though he was personally against them." [8]

Undaunted by rejection, Most began to develop key structural concepts for ETFs in the mid-1980s.[9] It took time for his ideas to gel and for regulatory preconditions to be met. But Street Global Advisors (SSGA) launched the SPDR (Standard & Poor's Depositary Receipts, commonly known as "spiders") S&P 500 Trust ETF (SPY) with Amex on January 22, 1993. It remains one of more than 2,900-plus ETFs available in the U.S.[10]

Despite his tenacious effort to bring ETFs to market, even Most was surprised by their appeal: "'I never thought they would be this big.' said Most. 'But the ETF was designed with the investor in mind, and they have low fees. Also, ETFs are a natural fit for stock exchanges, which have gotten behind them.'"[11]

Once established, ETFs advanced rapidly in the U.S. In 1996, the first international ETFs – each focused on a different country – began operating.[12] And since then, their number and type has exploded – they include everything from fixed-income to precious metals (gold, silver) to actively managed ("non-index tracking") ETFs.[13]

ETFs Did Not Remain a North American Best-Kept Secret

In April 2000, the London Stock Exchange and the Deutsche Börse became the first stock exchanges to list ETFs in Europe. Others quickly followed, from the Stockholm Stock Exchange in October 2000 and Euronext in January 2001 to Austria in November 2005.

---

[8] Barron's, "Bogle and ETFs: A Complicated History," Jan. 18, 2019 5:23 pm ET, Crystal Kim. bit.ly/34zxe4K.
[9] MarketWatch, "ETF inventor Most dies at 90," Dec 7, 2004 7:19 p.m. ET, John Spence. https://www.marketwatch.com/story/etf-inventor-nate-most-dies-at-90. ETF.com, "Nate Most, Exchange traded Fund Inventor, Dies at Age 90," December 08, 2004, Jim Wiandt. bit.ly/3vWSnkG.
[10] Morningstar U.K., "The History of Exchange traded Funds (ETFs)," February 14, 2012, Lee Davidson. bit.ly/3I7FeI0. Investopedia, "A Brief History of Exchange traded Funds," June 25, 2019, Stephen D. Simpson, CFA. bit.ly/3KthTBU. State Street Global Advisors, "History of Innovation," 2019. bit.ly/3pV76bU. ETFGI news release, January 13, 2023 - total number of U.S. ETFs: 2,931. https://bit.ly/3JtnmtE.
[11] ETF inventor Most dies at 90, MarketWatch, Dec 7, 2004 7:19 p.m. ET, John Spence. on.mktw.net/3I0DQGM.
[12] The Most Significant Events in ETF History, ETF Database, October 7, 2013; updated February 25, 2014, Jared Cummings.bit.ly/3KC7FPB.
[13] Ibid.

Just as in Canada and the U.S., a variety of ETFs were launched, including style, sector indices, fixed-income and commodities.[14] As a result, at the end of 2022, 9,537 ETFs/ETPs (Exchange Traded Products) were available from 671 providers on 81 exchanges in 64 countries.[15]

ETF growth elsewhere has enjoyed a speedy, if varying, ascent. For example, the Hong Kong Exchange listed its first ETF in 1999.[16] At the end of August 2022, Asia-Pacific (ex-Japan) had 2,685 ETFs, up from 23 in 2003.[17] While ETF uptake in Asia-Pacific initially lagged other markets, the region has matured rapidly, and the future potential of ETFs is captured in this quote from 2020: "Growth in the Asia-Pacific exchange traded fund market is continuing at breakneck pace as the rise in assets under management in China and Taiwan adds to strong performance by Japan-domiciled ETFs."[18]

The Canadian Market: Vibrant and Growing

Canadian ETF growth and innovation is ongoing. In 2017, the largest number of new issuers in a single year began operating and in that same year companies launched marijuana ETFs and explored launching cryptocurrency ETFs.[19] At of the end of 2020, the previous record years in 2017 and 2019 were shattered: Canadian investors committed $257 billion to ETFs.[20] And in 2021, new records were set: $53 billion in total inflows (27% more than 2020) to end the year with $323 billion in assets under management and 202 new products launched. In 2021, the first crypto-asset ETFs in the world launched and ESG ETFs doubled to 100 from 50.[21] Last year, the Canadian ETF market paused and took a step back in the midst of unprecedented challenges for capital markets. Nonetheless, Canadian ETFs took in $35 billion, while mutual funds suffered outflows of $35 billion as of November, National Bank Financial Markets reported in early 2023. Additionally, 152 new ETFs launched (33 delisted), bringing the total number of ETFs in Canada to 1,299.[22]

---

[14] "Exchange Traded Funds: History, Trading and Research," Handbook of Financial Engineering, Springer, pp.1-37, 2008. Laurent Deville, C. Zopounidis, M. Doumpos, P. Pardalos. HAL ID: halshs00162223, p. 6. bit.ly/3KvXT1F.
[15] ETFGI reports the global ETF industry gathered US$856 billion in net inflows in 2022, ETFGI.com news release, Jan. 12, 2023.https://bit.ly/3JUr5lu.
[16] Vanguard Hong Kong, ETF education centre, timeline. bit.ly/3pTLL2E.
[17] ETFGI reports ETFs industry in Asia Pacific (ex-Japan) has gathered record year-to-date net inflows of US$83.05 billion at the end of August 2022, ETFGI.com news release, Sept. 30, 2022. https://bit.ly/3Z1UiiB.
[18] Subscale markets 'coming of age' push ETF growth in Asia: Japan, China, Taiwan and South Korea are on the rise at a breakneck pace, Financial Times, Sept. 13, 2020, Selena Li. on.ft.com/3C9Dz2Y.
[19] Record breaking year for Canadian ETFs: The industry embraced innovation in 2017, Investment Executive, January 5, 2018 11:15, IE Staff. bit.ly/3vUqR78.
[20] Canadian ETF Flows: ETF Research & Strategy, National Bank of Canada Financial Markets, Jan. 5, 2021. bit.ly/3tv4OBl.
[21] Canadian ETF Flows: ETF Research & Strategy, National Bank of Canada Financial Markets. Jan. 6, 2022. bit.ly/372bi35.
[22] Canadian ETF Flows: ETF Research & Strategy, National Bank of Canada Financial Markets. Jan. 5, 2023. https://bit.ly/3ncEH2.

In a period of high inflation not seen in many years, investors everywhere continue to value cost-effective, tax-efficient, pooled investment vehicles to help them meet their financial needs. And ETF providers continue to respond.

When the 30th anniversary of ETFs in Canada arrived in 2020, COVID-19 briefly disrupted world financial markets but did *not* – and *could not* – undermine the inherent and proven strengths of the exchange traded fund model. Following the early, uncertain days of the pandemic, the markets reached new records in 2022. Since then, the world has since been gripped by an international crisis resulting from Russia's unprovoked war on Ukraine and, more recently, instability in the global banking sector. Those events (plus other economic factors) have combined with rampant inflation and an increase in interest rates not seen since before the Great Financial Crisis to create a remarkably complex investing environment. However, the long-term trendlines for ETFs were encouraging domestically and internationally before all of this occurred, and that positive outlook has not changed because the ETF model remains proven and sound.

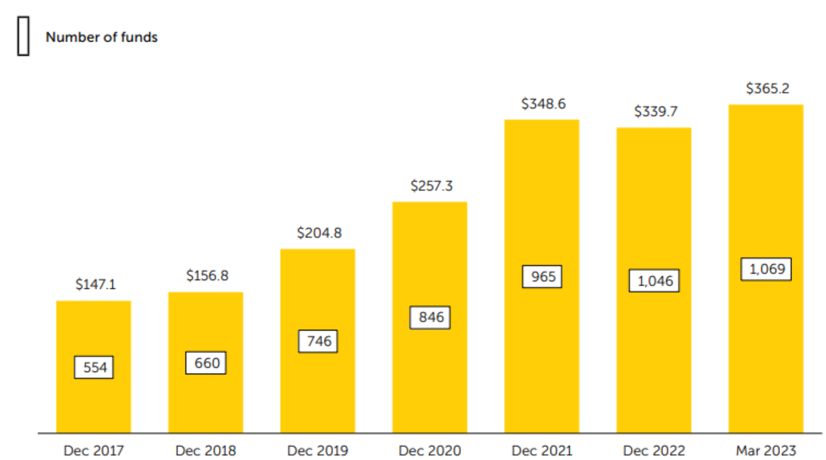
The future can never be predicted. However, the inherent strengths of ETFs and their proven resilience even in the face of exceptional market challenges that continued into 2023 are reasons for maintaining confidence in their future potential.

Canadian ETF Industry: *Their Extraordinary Growth*

The Canadian ETF industry has undergone extraordinary expansion since the launch of Toronto 35 Index Participation Units (TIPs) on March 9, 1990 (the world's first ETFs). Canadian-listed ETF assets under management (AUM) reached $89.5 billion at the end of 2015, but it took just four more years for ETFs to accumulate another $100 billion ($115.3 billion).

In 2012, only seven providers offered Canadian-listed ETFs. By the end of Q4 2022, the segment had grown to 42 sponsors and had achieved $314 billion in Canadian-listed assets under management. This represents a cumulative compound annual growth rate (CAGR) of 18% over a decade.[23] In 2022, ETFs outsold mutual funds, which suffered net outflows of $35.6 billion (to November), the first year of mutual fund outflows since the Great Financial Crisis in 2008-09. Despite persistent turmoil in 2022, ETFs still took in $35.5 billion in new inflows or 10% of their starting assets.

Figure 1. The Canadian ETF Market: Net Assets (In $billions)



Investor Economics, A Division of ISS Market Intelligence. (AUM total includes Canadian and U.S.-listed ETFs.)

ETFs increased their share of mutual fund assets to 19% at the end of December 2022 (based on CETFA calculations) from 7.3% in May 2016. Besides making strong inroads into the share of investment fund assets, ETFs have consistently captured a growing share of new sales. In 2021, ETFs generated $58.7 billion in net creations, far surpassing the previous record in 2020 of $42.1 billion.

---

[23] Section primarily developed with information from Investor Economics, a division of ISS Market Intelligence and National Bank of Canada Financial Markets, "Canadian ETF Flows: ETF Research & Strategy." Different methods of calculating AUM and flows to avoid double counting and for fund categorization lead to apparent discrepancies in the data presented. Where feasible, we have noted where these variations occur. However, it's important to emphasize that, in aggregate, the data accurately reflects the market picture of Canadian ETFs.

Last year, unprecedented volatility brought net creations back to $38.4 billion, which was nonetheless the third highest tally recorded since 2016.

Mutual Fund Company Market Entry

The fast expansion of ETFs has not gone unnoticed by mutual fund companies; many have entered the segment in recent years. By the end of the first quarter of 2019, most mid-sized and large Canadian fund sponsors had ETFs. [24] Of the 41 sponsors offering ETFs in Canada, only nine exclusively offer ETFs and do not have traditional mutual funds as part of their product shelf.

Despite exceptionally volatile markets in 2022, ETFs still took in $35.5 billion in new inflows, ending the year with $314 billion in assets under management.

An Explosive Growth in New ETFs in Recent Years

ETFs have seen rampant development in recent years. As of 2019, all six of Canada's major banks offered them and overall the year closed with a total of 117 new ETFs (78 equity, 27 fixed-income and 12 balanced mandates). Every calendar year from 2014 to 2017 welcomed a higher number of annual launches; the top annual record (thus far) of 202 was achieved in 2021. And despite the challenges of last year, 152 ETFs launched and 33 delisted. At the end of 2022, more than 1,299 ETFs (Canadian-listed, 1,046, including 688 equity funds and 238 fixed-income funds), were available from 42 sponsors.

During the past few years, a secular shift has boosted the share of Canadian-listed products, which aligns with ongoing development of the Canadian ETF landscape. The once relatively modest Canadian ETF market has matured dramatically, and the breadth of made-in-Canada solutions has exploded. Today, Canadian ETF investors can gain broad exposure through domestically listed products to a growing number of asset classes and strategies previously available only south of the border. This has included a number of world firsts over the years, including (most recently) the first spot-Bitcoin, first spot-Ethereum and first psychedelic ETF, which all launched in 2021.

Canadian-listed ETFs by Channel of Distribution

Full-service brokerage (FSB) remains the dominant retail distribution channel for ETFs among individual investors, accounting for 49.5% of retail assets ($129.2 billion in AUM) at the end of Q4 2022. The online/discount brokerage (ODB) channel held the second-largest (and expanding) share of retail ETF

---

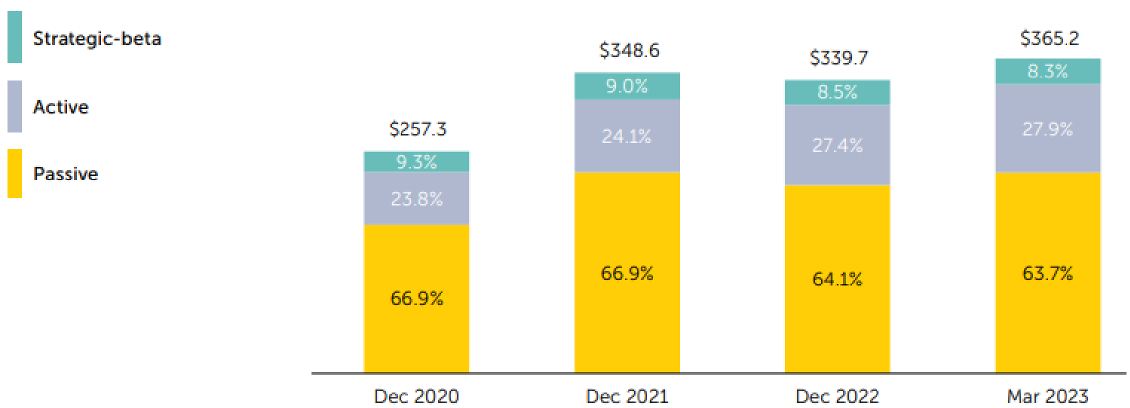
[24] "Of the 20 largest mutual fund companies, 14 now also offer ETFs." *2019 Investment Funds Report*, The Investment Funds Institute of Canada, p. 5

ownership, accounting for 37.5% ($97.8 billion in AUM). And robo-advice platforms held 7.6% (~$19.8 billion), up from a 4.6% share of $189 billion in 2020.

Strategies Have Become More Diverse and Sophisticated

As sponsors have continued to differentiate their offerings, Canadian ETFs have evolved far beyond their traditional index-replicating origins. With less ability to scale and compete against the broader index trackers, new entrants have emphasized alpha-seeking solutions. These ETFs feature actively-managed strategies ("non-index tracking"), tracking strategic-beta indexes employing quantitative models, or by providing exposure to a thematic investment mandate.

Figure 2. ETF Assets by Management Style
Assets in billions of dollars



Investor Economics, A Division of ISS Market Intelligence.

Non-index-tracking ("Active") ETFs have dominated product development in recent years, growing to 470 ETFs at the end of 2022 from 366 at the end of 2020. By comparison, index-tracking ETFs grew to 417 from 305 and strategic-beta ETFs declined to 159 from 175 over the same period. As of the end of 2022, index-tracking ETFs continued to dominate assets under management, holding 64.1%, followed by actively managed ETFs (27.4%) and strategic-beta (8.5%). Of the three categories, only actively managed ETFs increased their AUM share between Dec. 2020 and Dec. 2022.

Asset Classes and Allocations Continue to Evolve

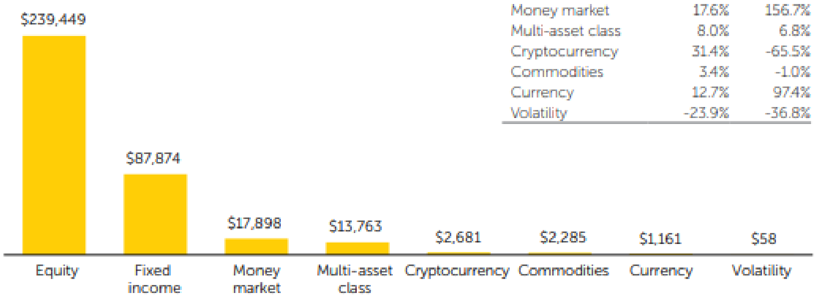
With an expansive range spanning many strategies and styles, Canadian ETFs cover a broad range of asset classes, from fixed-income and equities to commodities, real estate, and alternative mandates.

Despite the increased diversity in asset class exposure, Canada's largest ETFs are generally traditional index-tracking funds and, more specifically, equity index trackers. Overall, at the end of 2022, equity-based ETFs accounted for 41.9% of net creations; fixed-income, 30.5%; money market, 22.8%, and multi-asset class, 5.2%. (Smaller percentages were invested in the commodities, volatility and currency categories; the very public issues affecting cryptocurrencies caused knock-on effects on crypto-ETFs.)

Last year, non-tracking ETFs had the lower share of total inflows; accounted for more than 45% of the total number of ETFs, and held 25% of the market by AUM. Equity was the most popular asset class in 2022, followed by fixed income and then balanced.

Figure 3. Canadian ETF Assets by Asset Category
In millions of dollars as of December 2022

	Growth rates	
	3-mo	1-yr
All asset classes	**7.5%**	**3.7%**
Equity	7.1%	-1.6%
Fixed income	6.2%	12.4%
Money market	17.6%	156.7%
Multi-asset class	8.0%	6.8%
Cryptocurrency	31.4%	-65.5%
Commodities	3.4%	-1.0%
Currency	12.7%	97.4%
Volatility	-23.9%	-36.8%



	Equity	Fixed income	Money market	Multi-asset class	Cryptocurrency	Commodities	Currency	Volatility
Number of funds	705	245	60	21	10	23	4	1
12-mo launches	72	20	3	2	2	2	–	–

Investor Economics, A Division of ISS Market Intelligence.

During 2022, fixed-income ETFs dominated new inflows, accounting for $19 billion of new investment – their highest annual inflow in history. Equity ETFs received $13 billion, split equally between Canada, U.S. and international equities. Multi-asset ETFs (including "Alternative ETFs") garnered $1.9 billion in new flows. Following their 2021 introduction in Canada (a world first) and initial growth spurt, crypto-currency ETFs "fell back to earth" in 2022 with the collapse of FTX and crypto values and not (surprisingly) as a result of redemptions; nonetheless, investors continue to have an appetite for them.

Mutual Fund Sponsors Respond to the Demand for ETFs

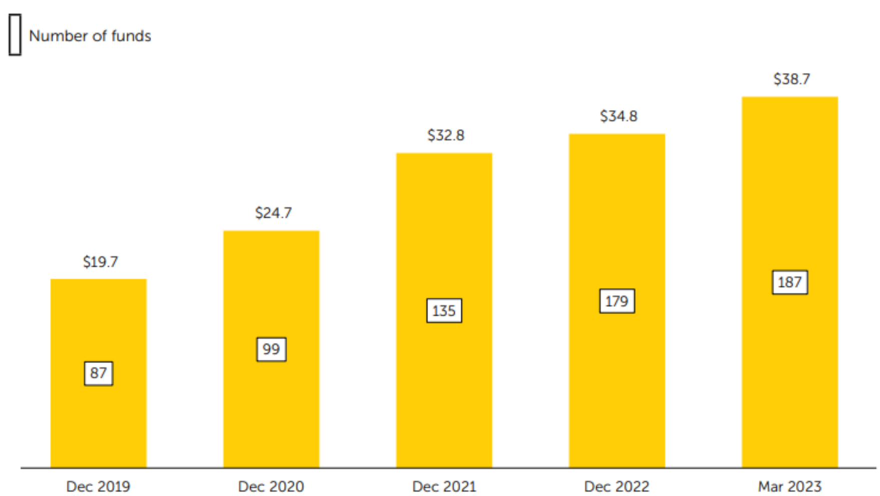
As exchange-traded funds have gained prominence in Canada, many mutual fund sponsors responded by expanding their product offerings to indulge retail investors' growing demand for ETFs (see footnote

24). An especially appropriate opportunity emerged in the mutual funds-of-ETFs segment because ETFs allowed for low-cost, diversified building blocks to be integrated into fund wrap programs.

As of December 2022, more than $34.8 billion in AUM had been invested in 179 mandates (covering both Canadian and U.S.-listed assets). Meanwhile, ETFs of ETFs held $14.3 billion in assets under management, and ETF series of existing mutual funds held $8.5 billion across 133 funds.

Figure 4. Assets in Mutual Funds that Invest Exclusively in ETFs

In billions of dollars.



Includes Canadian-listed and U.S.-listed ETFs. The Investment Funds Institute of Canada (IFIC), Investor Economics, A Division of ISS Market Intelligence and Morningstar Canada.

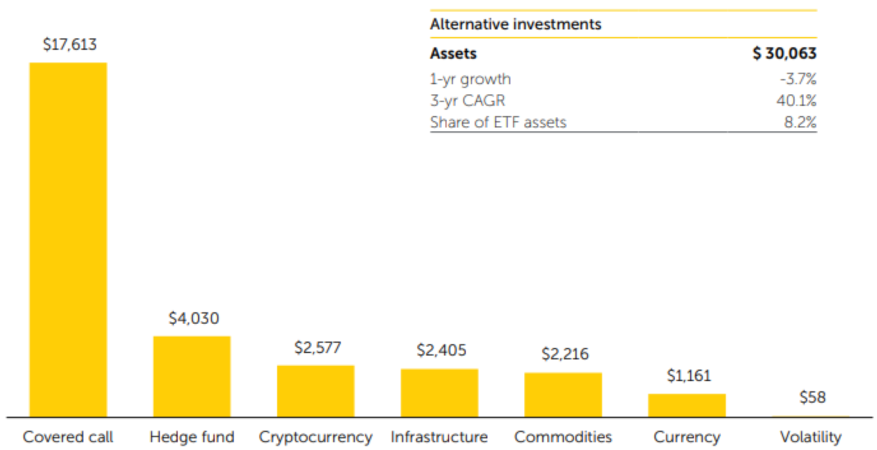
Alternative Strategies and Thematic ETFs Have Mushroomed

Thematic (or "specialty") Canadian ETFs have continued to grow in recent years, including 2022. In spring 2016, only three Canadian-listed thematic ETFs were available, but concentrated development has seen many new entrants since then. The thematic ETFs that held a dominant position at the end of 2022 were covered-call ETFs, which first launched in 2010, at $16 billion in AUM.

Innovation has been a continuous feature of the Canadian ETF market. In 2021, Several new themes became available, including semiconductor, metaverse, space exploration, psychedelics, lithium and battery technology ETFs. Canada can also lay claim to the launch of the world's first spot bitcoin and spot Ethereum ETFs. Growing demand for incorporating environmental, social and governance (ESG) factors into investment decisions saw the number of ESG ETFs more than double to 116 mandates in 2022 from about 50 in 2020.

These include ESG equity, bond and asset allocation ETFs and the variety of product types is growing. ESG ETF inflows remained strong in 2022 ($2.2 billion), resulting in $8 billion in AUM by the end of last year, National Bank Financial Management reports.

Figure 5. ETFs by Alternative Investment Strategy



Assets in millions of dollars as of March 2023. Adjustments have been made for double-counting.

Investor Economics, A Division of ISS Market Intelligence.

Prospects for a Strong Long-term Future and Resumed Growth Potential

Despite apparent challenges during 2022 that have carried over into this year, ETF assets under management have continued to reflect investors' long-term commitment to the product. Responding to expanding investor demand, Canadian ETF providers have launched and continue to launch new products that demonstrate responsiveness and innovative thinking.

The long-term trendlines for ETFs in Canada remain positive, even in the face of international financial uncertainties that had a material impact on net creations in 2022 and that not disappeared. Client-focused reforms (CFR) introduced at the end of 2021 and persistently high inflation, have made Canadian investors increasingly aware of and sensitive to the costs of investing. This transparency has reinforced ETFs as a preferred alternative to more expensive fund-oriented products.

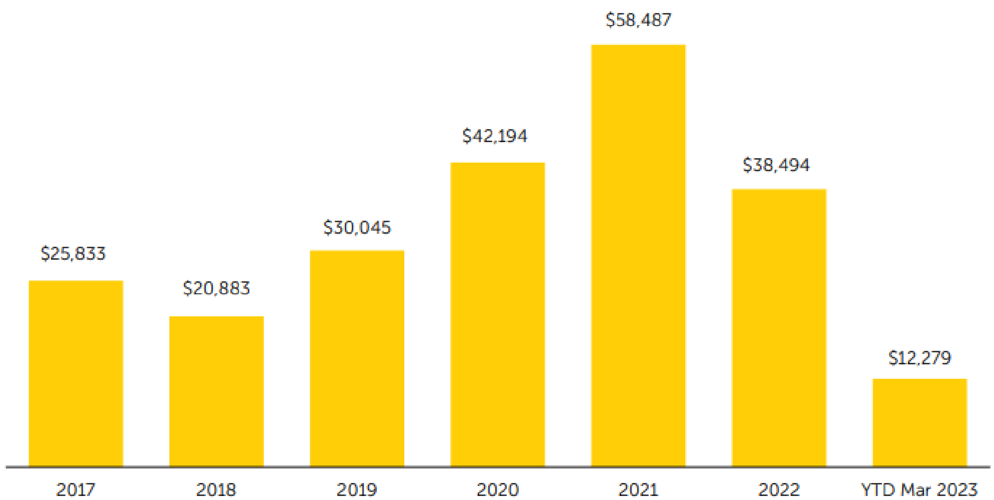
A broader population of investors has become increasingly familiar and comfortable with ETFs and are more motivated to seek lower-cost and tax-efficient alternatives to other fund types to achieve their financial goals. This intention increases the prospects for ETF uptake and adoption going forward. Concerns about the environment and sustainability that have made ESG ETFs appealing – especially to younger investors – have not abated, even if ESG has been subject to intense scrutiny more recently.

Research conducted for the CETFA with brokers in 2021 indicated that investment professionals were inclined to expand their use of ETFs with their clients. We believe that this expressed intent represents a valid long-term picture even if it is not apparent from quarter to quarter or year to year or is periodically "softened" by temporary factors (e.g., debates about ESG validity) at any given time.[25]

No one can accurately predict the future – we state this often through our social media channels. COVID-19 had a significant impact by skewing economic and investing behaviours in early 2020. Adding to unease caused by the pandemic, Russia's unprovoked invasion of Ukraine in February 2022 has continued to fuel geopolitical uncertainty. As this Guide was being updated, the ongoing fight against persistent inflation has continued to be waged through multiple interest rate hikes.

However, the resilience Canadian ETFs seen during 2022 indicates that they continue to appeal to investors and investment professionals and have retained strong long-term growth potential. Having survived and thrived through many previous market disruptions, ETFs remain deserving of investor confidence in Canada and around the world.

Figure 6. The Canadian ETF Market: Net Creations (In millions of dollars)



Investor Economics, A Division of ISS Market Intelligence.

[25] 2021 CETFA Environics Broker ETF Study, published Sept. 23, 2021: bit.ly/3KjQ5js.

Canadian ETF Mechanics: *How They Work*

Similarities to and Differences Between ETFs and Mutual Funds

Investors who are familiar with mutual funds will know that a fund manager builds and manages a portfolio by *actively selecting* stocks and/or bonds and/or other securities. That selection is based on stated goals, a definition of what the portfolio will own and how much, the risks it will accept, etc.

The investor – the *unitholder* – owns a certain number of *units* based on how much he/she has invested and the value of the fund units, which reflects the changing prices of the underlying securities, e.g., the stocks and/or bonds.

Mutual fund units are bought and sold through a financial advisor, a broker or a self-directed (online) brokerage – *not* directly on/through a stock exchange like ETFs. Though this part of the overall process may seem straightforward, there are many back-end systems and procedures that must function properly behind the scenes to support the transactions of thousands of mutual funds now available in Canada. And there are costs and complexities associated with that infrastructure – as well as for the fund manager's investment selection activities – that investors must bear.

Some product manufacturers have created their ETFs as a class of their mutual funds – not as a stand-alone Trust. This means that their disclosure documents would include a short form prospectus, instead of a long-form prospectus.

The performance of mutual funds will inevitably vary year over year and many do not perform better than, or as well as, the benchmark indices to which they are compared.[26] Additionally, because of how they are structured and operate, there are tax consequences when a fund manager sells securities to realize (or capture) gains; these may occur even if a fund has not performed well in a given year.

ETFs: A Different Model for Purchase, Creation and Redemption

Exchange traded funds (ETFs) follow a completely different path when it comes to purchase, creation and organization. ETFs are structured differently from mutual funds because they represent an entire index (a defined and measurable group of stocks and/or bonds) or a specific subset of it.

[26] "2022 was a relatively less challenging year for most actively managed funds in Canada. A little over one-half of active funds underperformed their benchmarks in several categories, including Canadian Equity at 52%, Canadian Focused Equity at 63%, U.S. Equity at 58% and Global Equity at 54%... . Canadian Dividend & Income Equity funds posted the lowest one-year underperformance, with just 42% lagging the benchmark. Underperformance rates generally increased with time horizons." SPIVA Canada Year-End 2022 Scorecard, S&P Dow Jones Indices, Data as of Dec. 32, 2022, p. 1.

With the exception of actively-managed ETFs, there is *no* active selection of securities or specific limitations on holdings with ETFs.

Depending on the fund, an ETF investor may acquire a much broader array of securities at a much lower cost, but the investment is only accessible through a stock exchange, not directly from the ETF provider (the company offering ETFs). When the investor buys/sells ETF units (either through an advisor/broker, or directly, or from an online broker), it is done right on/through a stock exchange. So even though the ETF represents a portfolio of securities, it is listed and is traded on an exchange like an individual stock. This differs from the mutual fund model where units are bought and sold through the mutual fund company. Transacting on an exchange does not have an impact on an ETF's total market value or the number of units outstanding.

How are ETFs Created and Managed?

If there's no fund manager to select an ETF's securities, how does an ETF unit get created? Once it exists, it's easy to understand how it's traded (bought and sold) in the secondary market, i.e., on an exchange. But how does an entire index – which represents a specific *group* of stocks/bonds, etc. – get translated into a tradable ETF unit on an exchange? With a new individual stock, the process begins with an "Initial Public Offering" (IPO), but the way an ETF comes into existence is quite different.

In Canada, the creation of an ETF unit is the responsibility of investment professionals, known as Designated Broker (DB)s or Designated Market Makers (DM)s (in the U.S., they're known as "authorized participants"). These professionals, who work in the capital markets divisions of the major financial institutions, are authorized by an ETF provider to create and to redeem ETF units. Every trading day, the ETF Portfolio/Fund Manager provides the Designated Broker/Market Maker with Portfolio Composition Files (PCF, also known as Portfolio Listing Files) of all the securities that each ETF should hold based on the index it follows. It will be used throughout the following day (the trading or "T" day) to generate an accurate, real-time value of a single unit of the ETF.

Matching the Index: A Snapshot Example.

If ABC Inc. represents 10% of the Index and XYZ Ltd. represents 5%, the ETF Fund manager directs the DB/DM to buy/sell their shares to get the proportions just right to match the index. There is no investment decision-making or active selection of stocks in the basic ETF model: it aims to mirror the index to ensure the securities held in the ETF are in the same "weight." Note that there are actively managed ETFs where a manager does exercise discretion over the portfolio and will modify its composition to achieve certain goals; however, these ETFs begin with the same index-based model of all other ETFs.

The grouping of stocks that the DB/DM creates (buys)/redeems (sells) is called the “creation basket.” The basket represents the securities the ETF holds – its “portfolio” – and also determines how much the portfolio is worth (its “intrinsic net asset value”) based on the prices of those securities during the trading day.

To create new ETF units, the DB buys shares/bonds, etc. on the exchange at the direction from the Portfolio/Fund Manager based on the relative percentages of those assets in the index. To source these shares/bonds, the DB may also use shares already held in its own inventory. The DB then supplies these shares/bonds to the ETF provider in exchange for an equal value (i.e., on a one-for-one basis plus/minus any cash component to make both sides equal) of the ETF units, which can then be sold on the exchange to individual investors. In Canada, the transactions between the DB and the ETF provider typically happens in large blocks of “Prescribed Number of Units” (PNUs in Canada; “creation units” in the U.S.), which allow an ETF to grow and/or shrink in total assets to respond to investor activity (i.e., direction to buy or sell units), which makes it an open-ended fund.

Many continuous activities are needed to support these processes and they occur essentially at the same time or in a quick sequence to create the entire creation-purchase-redemption lifecycle. Some of these activities occur during a normal business/trading day (9 a.m. to 4 p.m. ET), e.g., purchases and redemptions. Others happen at the end of day (4 p.m. to 8 p.m. ET), e.g., establishing the indicative net asset value (iNAV), generating the Portfolio Composition File (PCF), and booking any trades into custody.

The parties involved include a custodian (who provides safekeeping of ETF assets), lawyers, auditors, stock exchange staff, securities regulators, the Canadian Depository for Securities (CDS), which provides clearing, depository and settlement services), administrators/service providers (who track net asset values, etc.), the transfer agent registrar (an independent, external body/individual that maintains an ETF investor’s financial records) and fund administrator (who oversees day-to-day operational functions). For an expanded view of who does what, see the chart at the end of this section.

Figure 6. Interaction Between Primary and Secondary Markets

Primary Market (ETF Provider)			Secondary Market (Exchange)	
ETF Provider	Cash/Securities → ← ETF Share	**Designated Broker/ Designated Market Maker**	Cash → ← ETF Share	**ETF Seller**
	ETF Share → ← Cash/Securities		ETF Share → ← Cash	**ETF Buyer**

Illustration of the continual flows between ETF sellers and buyers in the primary markets (where ETFs are created) and the secondary markets (where they are traded) for physical ETFs.

Physical Versus Synthetic ETFs

The creation and administration model presented so far applies to the first of two broad categories of ETFs, commonly known as “physical ETFs.” They take this name because they own actual individual securities or physical assets (such as commodities).[27]

Another category of ETFs is known as “synthetic ETFs” because they use investment derivatives (e.g., a total return swap or TRS) to gain exposure indirectly to stocks and bonds, etc.[28] While the mechanics of synthetic ETFs in the secondary market (where investors buy and sell them) are identical to their physical counterparts, in the primary market where they are created, the processes include an additional transaction layer between the ETF provider and the swap counterparty who delivers exposure to capital markets. The DB cannot deliver the underlying securities in a synthetic ETF, so cash is used instead to enter into the derivative contract/agreement. It’s worth noting that most ETFs are physical ETFs and for the global ETF universe, only about 1,000 ETFs are synthetic, or about 11% of the universe of ETFs in 2022.[29]

Creation/Redemption Process – An Integrated Sequence of Actions

A good way to grasp the ETF creation/redemption process is to see it as a series of steps in time. Though the following sequence is simplified and therefore does not include every step or additional

[27] Exchange-Traded Funds: Evolution of Benefits, Vulnerabilities and Risks, Bank of Canada, Financial System Review, December 2014, Ian Foucher and Kyle Gray, p. 38. bit.ly/368Q0jz.
[28] Ibid, p. 38.
[29] Supporting the synthetic ETF product management challenge, ETF Express, Beverly Chandler, Nov. 22, 2022. https://bit.ly/3JVVJuR.

considerations (international order cut-off times, etc.), it does provide an overview of the key activities and when they occur.

<table>
<tr><td rowspan="4">T -1
One day before an ETF order
(Trade is placed with DB)</td><td>• Valuation agent finalizes Net Asset Value (NAV) for T (Trade date).</td></tr>
<tr><td>• Portfolio Manager identifies pending trade/rebalance activity.</td></tr>
<tr><td>• Valuation agent/ETF Administrator books all portfolio activity and accruals for T+1 (the day after the Trading date) for previous portfolio trades.</td></tr>
<tr><td>• ETF Administrator creates ETF basket/PCF and shares this information with related parties: the Canadian Depository for Securities (CDS) (and the National Securities Clearing Corporation (NSCC) in the U.S. if applicable).</td></tr>
</table>

<table>
<tr><td rowspan="3">T
Trade or
Order date</td><td>• Designated Broker places creation or redemption order with the fund company (directly or through ETF administrator) indicating how many creation units (PNUs) they would like to transact.</td></tr>
<tr><td>• Valuation agent finalizes the NAV to T and provides to the ETF administrator.</td></tr>
<tr><td>• ETF Administrator uses the NAV to price the total value of the ETF order, the value of any in-kind positions being transacted and any associated cash. The Administrator confirms the details to all affected parties.</td></tr>
</table>

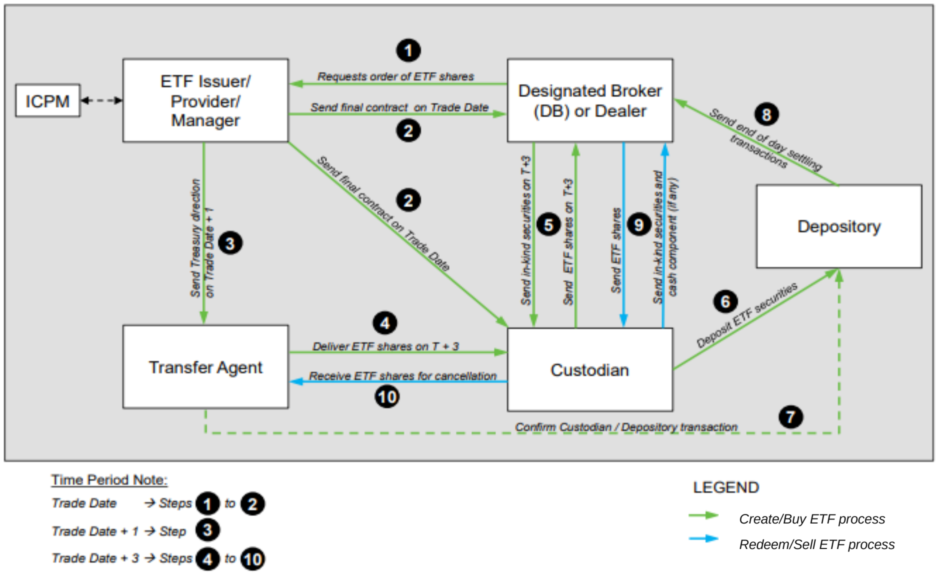
<table>
<tr><td rowspan="2">T +2
Settlement
Two days after an ETF order

Note:
There can be non-standard settlement cycles (T+0, T+1, T+3), depending on the circumstances and associated settlement cycle</td><td>Creations:

• Transfer Agent delivers ETF shares to Custodian.
• In-kind trades (Canada):
    o Designated Broker delivers all in-kind positions to Custodian
    o Custodian delivers ETF shares to the Designated Broker and receives any associated cash.
• In-kind trades (U.S.):
    o Custodian delivers ETF shares to Authorized Participant and receives all in-kind positions, collateral for short positions and any associated cash.</td></tr>
<tr><td>Redemptions:

• Designated Broker/Authorized Participant delivers ETF shares to the Custodian and receives all-kind positions and associated cash.
• Custodian delivers ETF shares to the Transfer Agent for cancellation.</td></tr>
</table>

Figure 7. Context Model for Canadian Primary Market ETF Process[30]



How ETFs Respond to Market Value Changes

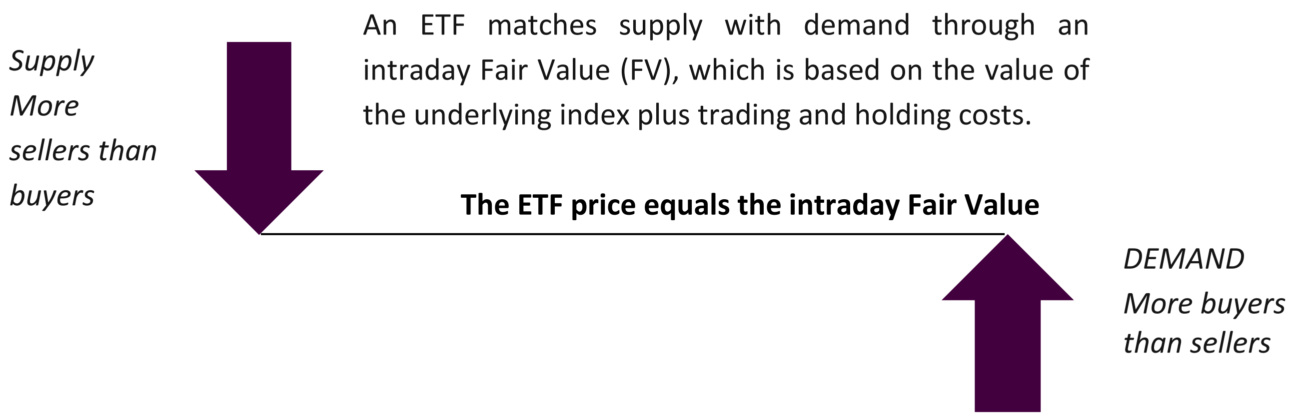
The value of individual investments is always changing, which means the index that represents them and an ETF that follows that index is always changing. So how does an ETF accurately reflect the value of the overall index it represents? The ETF manager buys or sells either the securities (stocks/bonds) or the ETF units on the open market until the value of the ETF units calibrate with the value of the underlying securities. Basically, it's a process of rebalancing supply and demand so that the intraday Fair Value of the ETF units and the index they track will consistently match.

The designated broker (or primary market maker) achieves this by "being long" for the ETF units (buying them in anticipation of long-term growth) and by "being short" for the underlying securities (buying them with the expectation they will decline in value). Being short with the underlying securities allows the ETF to stay market neutral.

As for Fair Value, the DB/Market Maker is taking the bid/ask pricing of the underlying and adding any costs (borrow costs, transaction costs, market risk, etc.) to come up with a bid/ask and the difference between the bid and ask is known as the bid/ask spread.

[30] The Canadian investment market is preparing to move to a T+1 settlement schedule from the current T+2 standard on May 27, 2024. "One-Year Countdown Until T+1 Standard Settlement Cycle Goes Live," Canadian Capital Markets Association (CCMA) News Release, May 30, 2023. https://bit.ly/3OtEMu2.

Figure 8. ETF Intraday Fair Value



Canadian ETFs: Who Does What

This chart presents a simplified account of the key players in ETF creations and transactions and is intended to complement the Creation/Redemption charts (above). Each party's involvement is largely reflected in the order presented. However, some activities are essentially continuous and there may be some overlapping of functions depending on the ETF provider.

Who	Does What
Investment Process	
ETF Provider/Portfolio Manager	Overall responsibility for providing legal, business and financial support services to enable the ETF to operate as an ongoing entity. Informs the custodian about trades and the contents of the creation/redemption basket.
Custodian	Provides safekeeping of the ETF portfolio's assets; generates an aggregate overview of the portfolio; records asset ownership.
ETF Provider & Accounting/Custody	Work together to process and settle creation/ redemption activity when orders are made and processed.
Designated Broker (DB)/ Designated Market Maker (DM)	Places primary orders via an order portal. They are approved by the ETF provider. Once approved, the ending NAV is used to value the order. The ETF service provider (or Transfer Agent depending on the situation) will then send a confirmation to the DB/DM, ETF provider/manager, custody and accounting to identify which securities (if any) need to be delivered in kind in

Who	Does What
	exchange for ETF units or how much cash should be delivered in exchange for ETF units (when there is a creation).
Fund Administrator	Processes the creation basket and calculates the daily iNAV. Responsible for valuation of the ETF resulting in the NAV to value and primary market orders. Also provides the projected NAV used to create the basket and possibly the PCF file.
Transfer Agent-Registrar	Processes the ETF shares. Responsible for creating and cancelling ETF units and processing ETF corporate actions.
Compliance (Auditors and Lawyers)	Monitors the ETF provider and its individual ETFs for compliance with regulations, policies, and procedures. Supports management functions requiring accounting and legal expertise.
Sub-Advisor	An external party or organization that may be retained by an ETF provider to manage some, or all, of the portfolio's assets because of specific expertise in a specific strategy.
Independent Review Committee (IRC)	A committee of at least three independent (external) members that each ETF provider must have to provide oversight of its funds and to monitor for conflicts of interest, etc.
Stock Exchange Staff	Administer ETF processing in the secondary markets.
Canadian Depository for Securities (CDS)	The national securities depository, clearing and settlement hub for the equity, fixed income and money markets.
Investment Brokers and Financial Advisors/Online Brokers	Work with individual investors to buy/sell ETFs; provide advice and places orders on their behalf. Online brokers typically provide execution services but not advice.
Support Services	
Index Provider	Delivers daily index constituents to the ETF provider for the purpose of tracking the portfolio, i.e., the basis for the ETF's investments. Examples of such providers include: FTSE Russell, MSCI, S&P, etc.
Data Vendors	Provide the ETF provider and its service suppliers with information about securities pricing, markets, website analytics, etc.

Who	Does What
Sales Team	Representative liaison with investment brokers/advisors and or directly with the investor depending on the business model.
Marketing Team	Develop education and marketing campaigns and messaging strategy for shaping an ETF's branding and for promoting the ETF provider and its funds to advisors and investors.
Regulatory Oversight	
Canadian Securities Administrators (CSA) and Provincial Securities Commissions	Co-ordinating body of Canada's 13 provincial and territorial securities regulators which seeks to harmonize regulation of the Canadian capital markets, including oversight of ETFs.
Canadian Investment Regulatory Organization (CIRO)	Licenses, regulates and provides oversight of the conduct of securities-licensed brokers who sell ETFs and the Exchanges.
Mutual Fund Dealers Association of Canada (MFDA)	Licenses, regulates and provides oversight of the conduct of mutual fund-licensed advisors who sell ETFs.

A Unique Investment Based on Proven Processes

While ETFs are a unique investment and how they are created, redeemed, rebalanced, etc. may seem novel compared to more familiar actively managed fund-based offerings, they rely on proven processes and draw on the capabilities of experienced marketplace participants – and have done so for more than 30 years. And just like other fund-based products, ETFs are eligible for registered plans that investors are likely to know about (e.g., RRSP, RESP, RRIF, TFSA, FHSA, RDSP, etc.) and can therefore be used to support a wide range of financial goals, e.g., retirement, higher education, first home purchase, etc.

For the sake of brevity, this high-level overview of ETF mechanics cannot and does not provide all of the technical details related to ETF management, which is beyond the aims and scope of this guide. For example, it does not describe procedures associated with managing international ETFs, nor does it mention strategies used by actively managed ETFs (e.g., market timing, sector rotation, short selling and buying on margin) that overlay passive ETF management. However, it does explain the core creation-redemption processes of the primary market and the key transactional activities (purchases and sales), that occur in the secondary market. These are consistent for *all* ETFs and are therefore critical to understanding how and why they work as a class.

Canadian ETFs: *Legal, Regulatory & Governance*

Canadian ETFs are subject to a rigorous and robust set of laws, regulations and governance requirements and to prudent oversight by multiple regulatory bodies to ensure compliance with the rules and protect investor interests.[31]

These include the provincial securities commissions (and their co-ordinating body, the Canadian Securities Administrators, CSA), as well as the Canadian Investment Regulatory Organization (CIRO), the self-regulatory organization that licenses and oversees the conduct of investment firms/advisors and mutual fund dealers and their financial advisors.[32] Beyond Canada's securities regulatory bodies, the exchanges on which ETFs are traded also set detailed standards and requirements (e.g., regarding minimum market capitalization, online financial disclosure, management/governance and notification periods) that must be met.[33]

The standards upheld by these organizations undergo ongoing review and periodic updating to deliver thorough protection to ETF investors. For example, at the end of 2021, new client-focused reforms (CFR) were introduced across Canada that, among other requirements, place additional obligations on financial advisors regarding knowledge and disclosure to clients of investment products (including ETFs) and their costs.[34] (CIRO is also updating its rules but it will take a few years before they're enacted.)

In Canada, ETFs are open-ended retail investment funds. Typically, they have the legal status of mutual fund trusts (MFTs, to provide efficient tax treatment and eligibility for RRSPs, etc.), and are regulated by provincial securities commissions; however, there are also ETF mutual fund corporations. Formally, they are classified as "exchange-traded mutual funds in continuous distribution" and, as such, are subject to the same regulations as mutual funds, including rules governing the use of derivatives.[35]

---

[31] This section provides an overview of the legal and governance regime for ETFs in Canada. It does not offer a detailed account of all rules and regulations ETFs must comply with and is not a substitute for sound legal advice.

[32] The CIRO (which combined IIROC and MFDA) began overseeing all investment dealers, mutual fund dealers and trading activity on Canada's debt and equity marketplaces on January 1, 2023 and formally took its new named on June 1, 2023.

[33] Amendments to TSX Company Manual Regarding Closed-end Funds, Exchange Traded Products and Structured Products, McCarthy Tétrault, Oct. 5, 2015. bit.ly/3MRdQl9. CBOE Canada Listing Resources, bit.ly/367BdWm.

[34] Validate your processes and think "win-win" when it comes to applying CFRs: The CFRs are really about formalizing and documenting processes to prove they're followed. Investment Executive, November 9, 2021, Pat Dunwoody, bit.ly/3hWUr3R.

[35] Exchange-Traded Funds: Evolution of Benefits, Vulnerabilities and Risks, Bank of Canada, Financial System Review, December 2014, Ian Foucher and Kyle Gray, p. 44. bit.ly/368Q0jz. See also the related footnote (18), which describes the National Instruments (NI) that govern ETFs.

Two key regulatory instruments govern open-ended retail funds, including ETFs:

- **National Instrument 81-102 (Investment Funds) (NI 81-102)** – Sets out core investment restrictions and operational requirements. It incorporates specific requirements that were previously set out in NI 81-104 (Alternative Mutual Funds).
- **NI 31-103 (Registration Requirements, Exemptions and Ongoing Registrant Obligations) (NI 31-103)** – Regulates registration requirements and the activities of registrants (i.e., investment and financial advisors). Updates to this regulation implemented in December 2021 permit the designation of a Trusted Contact Person (TCP) by investors and temporary holds on securities.[36]

National instruments (NIs) are rules that apply in all provinces and territories and have been adopted by the 13 provincial/territorial regulators.[37]

ETFs that employ leveraged strategies or are backed by commodity pools can be exempt from 81-102. For fund disclosure requirements, ETFs must also be compliant with NI 81-106 (Investment Fund Continuous Disclosure).[38]

Under NI 41-101 (General Prospectus Requirements), an ETF must generally prepare and file:

- **A long-form prospectus** – A detailed document with information about the ETF provider, terms of the ETF being offered and associated risk factors. However, when an ETF is a class of a mutual fund, only a short form prospectus is required.
- **ETF Facts** – A double-sided, two-page summary in plain language and an easily comparable format that describes a fund's investments, risk rating, past performance, and trading and administrative costs; it must be provided to investors within *two* business days of a purchase.

Initial versions of these documents and other required filings must be submitted by ETF providers to securities regulators through the System for Electronic Document Analysis and Retrieval (SEDAR+) and

[36] CSA Finalizes Amendments to Protect Older and Vulnerable Clients, Blakes, Aug. 6, 2021, Alyssa Duke and Jenna Green. bit.ly/37eeqJ3.
[37] Retail investment funds in Canada: regulatory overview, Thomson Reuters Practical Law, Darin R Renton, Jonathan W Willson and Malcolm Peck-McQueen, Stikeman Elliott. A Q&A guide to retail investment funds law in Canada. Q2.: What are the key statutes, regulations and rules that govern retail funds? Which regulatory bodies regulate retail funds? Law stated as at 01-Nov-2019. Retrieved March 10, 2022. tmsnrt.rs/3MFVqD.
[38] Exchange-Traded Funds: Evolution of Benefits, Vulnerabilities and Risks, footnote 18, p. 44. bit.ly/368Q0jz. Explanation of NI 81-104 and NI 81-106 from Retail investment funds in Canada: regulatory overview. tmsnrt.rs/3MFVqD.

the System for Electronic Disclosure by Insiders (SEDI) for review and approval before they can be shared with investors.[39]

The ETF can only sell to the public after a receipt has been issued for a final prospectus; it then becomes a "reporting issuer" and must meet ongoing filing and disclosure requirements.[40]

An ETF prospectus must be provided to an investor on request within *three* business days at no charge or, as an alternative, the ETF Fact Form. The prospectus must be updated periodically if there are material changes and must be renewed annually as it lapses after 12 months.[41] Foreign funds are effectively prevented from filing a short-form prospectus or long-form prospectus and offering shares to the public.[42]

Investment Professionals Regulatory Authorities and ETFs

As noted, Canada has a single national self-regulatory bodies (which began operating in January 2023 and was formally renamed in June 2023) that provides licensing and regulatory oversight to investment professionals who sell ETFs.

- **The Canadian Investment Regulatory Organization (CIRO)** is the national self-regulatory organization that oversees all investment dealers, mutual fund dealers and trading activity on Canada's debt and equity marketplaces. CIRO continues the regulatory functions of the Investment Industry Regulatory Organization of Canada (IIROC) and the Mutual Fund Dealers Association of Canada (MFDA) and is committed to the protection of investors, providing efficient and consistent regulation, and building Canadians' trust in financial regulation and the people managing their investments.

  CIRO-regulated firms and their advisors are qualified to buy and sell ETFs on behalf of their clients and have direct access to the stock exchanges where ETFs are traded. Previously MFDA-regulated firms must have formal relationships with previously IIROC-regulated firms to allow for this access. Their advisors (formally known as "Approved Persons") may only trade ETFs for their clients if they meet mandatory MFDA proficiency requirements (education, training, and experience).[43] We expect that CIRO's rules governing ETFs will be harmonized over time.

---

[39] SEDAR+: sedarplus.ca/landingpage/. SEDI: sedi/ca/sedi/. SEDAR+ launched on July 25, 2023.
[40] Retail investment funds in Canada: regulatory overview, Q. 3: Do retail funds themselves have to be authorised or licensed? tmsnrt.rs/3MFVqD. Description of ETF Facts from CSA: bit.ly/3vWuDgw.
[41] Ibid, Q. 3: Do retail funds themselves have to be authorised or licensed?
[42] Ibid, Q. 3: Do retail funds themselves have to be authorised or licensed?
[43] Proficiency Standard for Approved Persons selling Exchange Traded Funds ("ETFs"), MFDA Policy No. 8, July 20, 2017. bit.ly/3CwlE6Q.

ETF Governance: Ensuring Proper Oversight

The governance model for ETFs in Canada may vary by firm and with firm size. Each ETF provider has adopted a governance model that aligns with its obligation for providing sound oversight (compliance with an ETF's stated investment strategies, internal guidelines and securities regulations) according to its own organizational structure and best management practices. The governance function may be performed by assigned inhouse staff or it be outsourced, depending on the provider, its resources, operating philosophy and priorities.

Under NI 81-107 (Independent Review Committee for Investment Funds), all publicly available investment funds in Canada – including ETFs – must have a "minimum, consistent standard of independent oversight" to avoid conflicts of interest. These requirements align with international standards of fund governance but have been adapted by the CSA for the Canadian setting. The Independent Review Committee (IRC) is unique to Canada and must consist of at least *three* members: all of them must be independent from the manager and the fund.[44]

NI 81-107 requires ETF managers to refer all conflicts of interest to the IRC; to establish written policies and procedures for dealing with them, to maintain records about such conflicts and to provide the IRC with guidance and support in fulfilling its responsibilities. The ETF manager must also conduct regular assessments of IRC members and the IRC must report at least annually on its findings to the ETF's investors. The members of an ETF's IRC are identified in its prospectus.

In addition to looking after its own governance obligations, an ETF manager may also exert influence over the governance of companies held in its funds by voting on specific measures for the benefit of its investors. ETF managers typically have declared policies that govern their proxy voting.[45]

In summary, the laws, regulations and governance standards that define and control Canadian ETFs are strong but flexible, are regularly reviewed for suitability and have prudently evolved as the industry has matured. They provide firm and clear management and operational guidance/requirements for ETF providers and financial professionals and lend confidence to investors. Aspiring ETF providers from outside Canada are well-advised to seek out expert guidance on the full scope of obligations they must meet before considering entry into the Canadian market.

---

[44] 81-107 - Independent Review Committee for Investment Funds, OSC. Retrieved March 10, 2022. bit.ly/37ptzrn.
[45] Busting myths of ETFs: ETFs are popular, but they're also misunderstood, investmentexecutive.com, September 20, 2019, Michelle Schriver, bit.ly/3MI0yY0.

Canadian ETFs: *How They're Taxed*

The Taxation of ETFs

The Tax Efficiency Advantage of ETFs

Passive (index-based) ETFs can be more tax-efficient than actively managed mutual funds due to lower portfolio turnover ratios and potentially lower redemptions, as investors typically sell their units or shares on the market, and the market maker may then sell those units or shares to other investors on the market rather than redeeming them. Conversely, conventional mutual fund unitholder redemptions occur directly with the fund, which means the fund may have to sell investments to provide cash for the redemptions, thereby realizing gains or losses. However, in either case, capital gains distributions may be minimized with allocations to redeemers (ATR) of capital gains or the capital gains refund mechanism.

Some ETFs are structured as classes of a multi-class mutual fund corporation (MFC), in which each class of shares tracks the performance of a separate investment portfolio. This structure can be more tax efficient because the MFC is regarded as a single entity for tax purposes. As a result, an MFC can pool the income, expenses and losses of all of its classes together, which on a net basis can be more tax efficient than if each fund is structured as a separate trust. The main disadvantage of MFCs is their inability to distribute net investment income other then Canadian dividends and capital gains to shareholders, which may mean the corporation is subject to non-refundable income taxes.

As noted, some ETFs are structured as classes of a multi-class corporation that qualifies as an MFC under the *Income Tax Act* (Canada, the Tax Act). Beyond an MFC's potential tax efficiency from pooling the income, expenses and losses of all of its classes together, other benefits of having mutual fund corporation status include:[46]

- Can flow Canadian source dividends and capital gains through to shareholders by paying ordinary dividends and capital gains dividends.
- Can choose an off-calendar taxation year-end.
- Eligibility for capital gains refund, which allows the corporation to retain some capital gains without incurring tax.
- Exclusion from being categorized as a "financial institution" – even if it is controlled by a financial institution.
- May provide more certainty for capital gains treatment on the disposition of Canadian securities where a subsection 39(4) election under the Tax Act is filed.

[46] Please note that many of these benefits also apply to a mutual fund trust as well. Consult a tax expert for details.

- Exempt from filing T1135 form (which requires disclosure of more than $100,000 of specified foreign investments).
- Capital gains dividends paid to non-resident shareholders are generally not subject to withholding tax.

The main disadvantage of MFCs is their inability to distribute net investment income other then Canadian source dividends and capital gains to shareholders, which may mean the corporation is subject to non-refundable income taxes if such other income exceeds the corporation's expenses and available losses.

Three Tests to Qualify as a Mutual Fund Trust

Generally, a trust must pass three tests to qualify as a mutual fund trust (MFT):

1) It Must be a Unit Trust Resident in Canada

In Canada, there are two types of unit trusts: open-ended and closed-ended. To qualify as an open-ended unit trust, at least 95% of the fair market value (FMV) of all issued units of the trust must be redeemable on the demand of the holder. In practice, these redemption rights are subject to certain frequency and valuation restrictions. A closed-ended trust doesn't need to make its units redeemable on demand but must comply with other restrictions:

- Its only undertaking may be investing its funds in property (except real property or an interest in real property) or acquiring, leasing or managing any real property or interest in real property that is capital property to the trust, or a combination of both.
- At least 80% of the trust's property must be specific, listed types of property, such as shares, bonds, cash and marketable securities.
- At least 95% of its annual income must come from the listed types of property or the sale of those properties.
- At no time during the year may more than 10% of the trust's property be bonds, securities or shares of any one corporation or debtor other than the federal government of Canada or a province or a Canadian municipality.

2) Restrict Activities to Certain Investment Activities

The trust's only undertaking can be (i) investing its funds in property (other than real property or an interest in real property or an immovable or a real right in an immovable), (ii) the acquiring, holding, maintaining, improving, leasing or managing of any real property (or interest in real property) or of any immovable (or real right in immovables) that is capital property of the trust, or (iii) a combination of these.

3) Meet Prescribed Distribution Conditions

A class of units of the trust must be "qualified for distribution to the public," or the trust must have made a lawful distribution to the public of units of the trust in a province where a prospectus, registration statement, or similar document did not need to be filed under that province's laws for the distribution. There must be at least 150 beneficiaries, each of whom holds at least one "block of units" of that class, and units of that class have a combined fair market value of at least $500.

A "block of units" is defined as:

- 100 units if the FMV of one unit of the class is less than $25;
- 25 units if the FMV of one unit of the class is $25 or more but less than $100, and
- 10 units if the FMV of one unit of the class is $100 or more.

Taxation of ETFs – Computing Income

When computing its income, an ETF must include various types of amounts, including:

- Taxable distributions received on securities held by the ETF, including special dividends;
- Interest, including amounts deemed to be interest, as with real return bonds or zero-coupon bonds;
- Income earned from securities lending activity;
- Gains and losses from transactions considered to be adventures or concerns in the nature of trade, and
- The taxable portion of capital gains realized by the ETF on selling securities and on derivatives that are entered into in order to hedge and are sufficiently linked with securities that are held on capital account by the ETF. If an ETF elects, under subsection 39(4) of the Tax Act, gains and losses realized by selling "Canadian securities," they will be taxed as capital gains and losses.

If an ETF invests in another Canadian resident trust (e.g., another ETF), generally the underlying fund may designate a portion of the amounts it distributes as may reasonably be considered to consist of taxable dividends (including eligible dividends) and net taxable capital gains. If the underlying fund pays foreign withholding tax, it may make designations to treat its unitholders as having paid that tax.

Suspended Loss Rules

An ETF may be subject to suspended loss rules. A loss from selling property may be considered to be suspended when an ETF buys a property (a "substituted property") that is the same as or is identical to the property sold, 30 days before and 30 days after the sale and the ETF owns the substituted property

30 days after the original sale. If an ETF's loss is suspended, that ETF cannot deduct the loss from its gains until the substituted property is sold; it must not be reacquired 30 days before and after the sale.

Canadian Dollar Calculations

An ETF is generally required to compute its income and gains in Canadian dollars for tax purposes. This means income, cost, proceeds from sales and other investment amounts not denominated in Canadian currency will be affected by changes in the exchange rate of the Canadian dollar against the applicable foreign currency.

Distribution Protocols

For an ETF structured as a trust, the Declaration of Trust typically requires that it distribute all its net income and net realized capital gains earned in the taxation year to its unitholders. Otherwise, the trust will be subject to tax at the highest marginal rate on its ordinary income after considering available losses and capital gains refunds the trust is entitled to. There is a greater tax advantage in passing the income to unitholders and having it taxed in their hands as their marginal tax rate may be lower. For an ETF structured as a class of a mutual fund corporation, the corporation will typically pay enough ordinary dividends or capital gains dividends so that the corporation will not pay Part IV tax on its Canadian source dividends or normal income tax on its net realized capital gains.

Both MFTs and MFCs benefit from capital gains refunds, that allow them to retain some of their realized capital gains without incurring tax liability. These mechanisms are intended to alleviate the potential for double taxation when an investor realizes a gain on redeeming units or shares, and the ETF realizes gains on selling assets to pay for that redemption. Ordinary dividends must be paid before the end of the relevant taxation year, while capital gains dividends must be paid within 60 days of the end off the relevant taxation year.

Historically, some ETFs allocated capital gains or income or both to redeeming unitholders, reducing amounts that must be distributed to unitholders who hold units on the relevant distribution record dates. Mutual fund trusts are now prohibited from allocating income to redeemers, and recently enacted amendments limit the amounts of capital gains that ETFs can allocate to redeemers based on a prescribed formula.

For more information about the taxation of ETFs, please consult the Canada Revenue Agency or an authoritative tax expert.

ETFs: *Required Reporting*

Like other investments (e.g., mutual funds), ETFs generate a variety of reports to provide investors/clients, financial managers and financial authorities with required information for regulatory, taxation and related purposes. This section of the Guide to the Canadian ETF Industry provides an overview of key required reports.

FOR INVESTORS/CLIENTS:

Account Statements

While investment account statements may vary by company, they all capture and convey essential information about an investors' investments and their value, activity (buying, selling, etc.), as well as expenses for the identified period of time. They provide investors with the basis for assessing the health of their portfolios and for making informed decisions about their investments.

Distribution Declarations: Income and Capital Gains

ETFs may pay their distributions to investors in cash or may reinvest them in the fund. Generally, net income (such as interest income, foreign income and dividends) received by the ETF is distributed to investors in cash on a monthly or quarterly basis during the year. Net realized capital gains are calculated annually at year-end and are usually reinvested in the ETF.

Similar to mutual funds, reinvested distributions are provided to ETF investors as additional units of the fund. However, with ETFs, immediately after a capital gains distribution reinvestment, the units outstanding are consolidated, so that the number of units owned by investors is the same as before the distribution. As a result, ETF investors will not see an increase in the number of units they own, and there will be no change in the net asset value per unit (NAVPU). (See related information about "Notional/Phantom Distributions.")

When declaring distributions not paid in cash, information sent to investors must also be provided to the exchange on which the ETF is listed, and must also be made public via a news release.[47] For listings on the TSX, Form 5 – Dividend/Distribution Declaration – must be completed and filed on TSX SecureFile (TSX does not accept news releases for dividend notification) at least five trading days before the record date. For CBOE Canada, Form 7 – Stock Dividend – must be completed for notional reinvested capital gains distributions and Form 7A – Cash Dividend – for cash (income) distributions must be filed.

[47] The information is also sent to investors' brokers/financial advisors.

Most Canadian ETFs feature cash distributions. However, some ETFs may provide distributions as additional units and consolidate their units at the same time, creating "notional distributions." Investors incur a tax liability during the year when this happens (similarly for any cash distributions) and will receive a T3 tax information slip for the notional payment, even though they received no cash to pay the taxes. Phantom distributions increase the ETF investor's adjusted cost base (ACB). This reduces the capital gain (or increases the capital loss) when investors sell their holdings. Investors therefore need to adjust their ACB when selling their units to avoid paying taxes twice on notional distributions. ETF providers, financial firms, online brokerages and external service providers offer solutions to help investors calculate their adjusted ACB.

FOR REGULATORY AND AUDIT PURPOSES:

ETFs are responsible for delivering a number of required reports to provide transparency and to comply with securities legislation. Here is an overview of these filings:

- **Long-form Prospectus (NI41-101)** – A long-form prospectus is a key legal document that provides required information about an ETF (e.g., investment strategy, risks, distributions and other features) for investors.
- **National Instrument 81-102 (NI 81-102)** – ETFs are subject to investment restrictions and limitations under NI 81-102. ETFs must file quarterly reports in prescribed form for any NAV adjustments in the quarter.
- **National Instrument 31-103 (NI 31-103)** – Defines proficiency, experience, and related requirements for investment professionals and applies to those who sell ETFs.
- **Audited Financial Statements** – An independent auditor has opined on the fairness of the ETF financial statements and compliance with International Financial Reporting Standards.
- **Management Report of Fund Performance (MRFP)** – Provides essential disclosure of specified financial information and management analysis of an ETF's performance and costs for up to five years using a prescribed format.
- **ETF Fund Facts** – A two-page, double-sided summary disclosure document that must be provided to ETF investors within two business days of purchase; it includes risks, past performance, costs of investing, as well as trading and pricing characteristics and other essential information in a prescribed format that makes it easier for investors to compare ETFs.

FOR TAXATION PURPOSES

Tax Slips (T3s)

With ETFs, an investor's broker is responsible for providing all required tax slips, including T3 tax slips. This differs from the typical mutual fund model in which the mutual fund company maintains investor accounts and provides tax reporting directly to investors.

ETF administrators provide brokerage firms with the information they need to prepare an investor's T3 tax slips through Clearing and Depository Services Inc. (CDS). Specific tax factor information (e.g., proportionate share of distributions attributable to dividends, income, capital gains, return of capital or foreign tax withheld per unit per fund) are outlined on prescribed forms posted on CDS by ETF providers, which can be retrieved by the brokerages.

Investors who received distributions throughout a calendar year will get information on the tax treatment of those distributions: it will generally reflect the dividends, interest income, foreign income and capital gains of the underlying portfolio. ETF providers normally target sending tax factor information to CDS by the end of the third week of February after the end of each calendar year. Brokerage firms must provide investors with T3 tax slips by mid-March.

Tax Slips (T5s)

Depending on the ETF held, an investor may also receive a T5, which reports various types of investment income, including eligible dividends and dividends other than eligible dividends (including most deemed dividends), as well as interest income and blended payments of income and capital. Investors must be sent their T5 slips by the last day of February or the next business day if the last day is on a weekend.

ACB Adjustment for Reinvested Distributions

ETFs may distribute interest, foreign income, dividends, capital gains and return of capital to investors annually at year-end. Income distributions are usually paid in cash periodically throughout the year (monthly or quarterly). The net effect of the capital gains distribution is to increase the adjusted cost base (ACB) of the ETF units. By doing so, the distribution is treated for tax purposes as a capital gain and is recorded on a T3 tax slip under "re-invested distributions per share."

Whether the distribution is reinvested or is paid in cash, the distribution will be taxed as interest, dividend, foreign income or capital gain. When the distribution is made, the ACB of the ETF unit decreases by the amount of the distribution. If the full distribution is reinvested, it is added to the ACB of the ETF and the ACB change is net zero. ETF providers usually disclose the notional reinvested distributions on their websites, so investors can easily retrieve this information to calculate their ACBs.

The ACB is calculated as follows:

Total Purchase Price (Including Commissions)
+ Reinvested Distributions
- Return of Capital
= ACB

Form T1135

Canadian individuals, corporations, trusts and partnerships that held specified foreign property worth more than C$100,000 any time during a taxation year must file a Foreign Income Verification Statement (Form T1135) unless they meet certain exceptions. A Canadian mutual fund trust is excluded from the definition of "specified Canadian entity."

Since most Canadian ETFs are mutual fund trusts for tax purposes, they do not have to file Form T1135. And because an ETF is not considered "specified foreign property," investors in Canadian ETFs do not need to report such investment on Form T1135 – even if a Canadian ETF itself invests in international securities.

Passive Foreign Investment Company (PFIC) Statements

The Passive Foreign Investment Company (PFIC) rules are designed to prevent U.S. persons from deferring tax on passive income earned through non-U.S. corporations, or from converting this income into capital gains taxed at preferential rates.

A PFIC is a non-U.S. corporation – including Canadian ETFs and mutual fund trusts – that is primarily invested in passive assets or generally earns passive income. Under the PFIC rules, income from a PFIC may be treated as ordinary income for U.S. tax purposes and is subject to U.S. ordinary income tax rates. These rates can be significantly higher than Canadian tax rates for certain types of income, such as capital gains or dividends depending on the province or territory. Any tax owing from the PFIC may also be subject to an interest charge.

Although they're not obligated to do so, Canadian ETF providers may post PFIC information for certain funds on their websites so that investors who are U.S. persons can access it for filing their U.S. taxes. The annual PFIC Statement features reporting to enable U.S. persons to make the Qualified Electing Fund (QEF) election for U.S. tax reporting purposes. This makes it easier for investors subject to the PFIC rules to make the appropriate elections when complying with U.S. tax filing requirements.

In summary, financial and tax information provided to investors of Canadian ETFs, as required by the Canadian regulatory and tax authorities, provides excellent transparency and insight into an ETF's performance and costs. It gives investors (and their advisors) useful information so they can make sound investment decisions and take advantage of available tax benefits.

Canadian ETF Infrastructure: *Participants & Distribution*

While it may still be considered a relatively "young" sector, the Canadian ETF industry has developed and matured swiftly over the last decade, a process that is accelerating and is poised to continue.

As indicated by the charts (below), the industry consists of a variety of large, multiline financial institutions, standalone mutual fund and investment companies that have embraced ETFs, and ETF-specific providers, among others. Beyond the organizations that offer ETFs is a broader and well-founded infrastructure that makes it possible for ETFs to operate, including the designated brokers, transfer agencies, custodians and stock markets where ETFs are traded.

Company	CETFA Member	Company	CETFA Member
Accelerate Financial		Invesco Canada Ltd.	✓
AGFiQ	✓	Lysander Funds	
Arrow Capital Management		Mackenzie Investments	✓
BlackRock Canada	✓	Manulife Investment Management	✓
BMO Asset Management	✓	Middlefield	
Bristol Gate Capital Partners		Mulvihill Capital Management Inc	
Brompton Funds		National Bank Investments	
Caldwell Securities Ltd.		Ninepoint Partners	
CI Global Asset Management	✓	Norrep	
CIBC Asset Management	✓	Picton Mahoney Asset Mgmt	
Desjardins Investments	✓	PIMCO Canada	
Evolve Funds		Purpose Investments	
Evermore Capital Inc.		RBC Global Asset Management	
Fidelity Investments Canada	✓	Russell Investments	
First Trust Portfolios Canada		Scotia - 1832 Asset Management, Dynamic Investments	✓
Franklin Templeton Investments	✓	SmartBe Wealth	
Guardian Capital LP		Starlight Investments	
Hamilton ETFs	✓	TD Asset Management	✓
Harvest ETFs	✓	Vanguard Canada	✓
Horizons ETFs	✓	3iQ	
IA Clarington			

Designated Brokers

Company	CETFA Member	Company	CETFA Member
BMO Capital Markets		Canaccord Genuity	
CIBC Capital Markets		RBC Capital Markets	
National Bank Capital Markets	✓	Virtue Financial	
Scotia Capital Markets		Société Générale	
TD Capital Markets			

Transfer Agencies

Company	CETFA Member
Computershare	
State Street Trust	✓
TMX Trust	

Custodians

Company	CETFA Member
CIBC Mellon	✓
RBC ITS	✓
State Street Trust	✓

Stock Exchanges

Company	CETFA Member
Toronto Stock Exchange	✓
CBOE Canada	✓

ETF Distribution Channels

Where do Canadian investors buy and sell ETFs? As is the case with other aspects of the ETF infrastructure, the distribution network for ETFs is well-developed, making it possible for Canadian investors to have ready access through a variety of channels.

The Canadian financial services market is dominated by its six major banks that, in addition to acting as DBs/DMs, serve in the dual role of being ETF providers, as well as distributors. Each of the major financial institutions has a full-service brokerage, inhouse advisors eligible to offer ETFs and online/discount brokerage (ODB) arms that provide investors with the ability to trade ETFs – their own and those of third-parties.

However, there is also an array of independent firms that offer ETFs – including mutual fund companies that recognized a great opportunity when they saw one. These include boutique securities-licensed portfolio managers, financial advisories that have relationships with brokerage-licensed firms, as well as standalone ODBs and robo-advice platforms.

As noted in a previous section describing the extraordinary growth of ETFs, full-service brokerage (FSB) is the major distribution channel for ETF assets; it is followed by the online/discount brokerage channel; the robo-advice channel, though growing, remains the smallest of the three.

In summary, the Canadian ETF sector is robust and is faring well with marketplace challenges. Canadian investors are well served by reputable companies that offer scale, market expertise, well-established and sophisticated distribution networks and constantly growing product variety.

Canadian ETF Distribution: What Non-Canadian Firms Should Consider

If your firm is new to the Canadian ETF world, you should consider these two key differences related to ETF distribution before launching and marketing your funds to Canadian financial advisors.

1) **While the daily CDS report will show you the number of units per ETF that each firm holds, there is no breakdown by branch or advisor; therefore:**
    - You cannot be absolutely certain which advisor has bought and sold your ETFs.
    - Your wholesaler compensation program should be team-based and reflect AUM and general flows – it should not be tied to individual sales targets or results.
2) **MFDA-licensed advisors (who are also now increasingly selling ETFs) must pass their trades through their IIROC-licensed partner before going to the market. This indirect flow makes understanding their AUM challenging.**

ETFs: *Debunking Old & Tired Myths*

Are ETFs Riskier Than Mutual Funds?

As exchange-traded funds (ETFs) grow in popularity and diversify in style and structure, old myths persist and new misconceptions occasionally develop. At the Canadian ETF Association (CETFA), we take the job of debunking these myths seriously because our mandate is to help Canadian investors and advisors make the best-informed portfolio decisions. One of the ongoing discussion points about ETFs is their risk profile relative to mutual funds. While they differ in structure, ETFs are *not* inherently more risky than mutual funds. Here's why.

ETFs Versus Mutual Funds

ETFs and mutual funds are both baskets of securities. ETFs and mutual funds are both baskets of securities, or provide exposure to baskets of securities. They are sold in shares or units and offer market diversification in an easy-to-access investment vehicle. The basket may contain, or provide exposure to, stocks, fixed-income securities, currencies, derivative securities or other assets from any region or sector, depending on the fund mandate. The two vehicles differ primarily in how they are bought and sold. But is one risker than the other? The risk of each product is primarily driven by the investment objective of the ETF or fund and leverage that may be employed, rather than the structure of the ETF or fund itself.

The CETFA is unaware of any credible evidence that demonstrates that ETFs carry a higher level of risk than mutual funds. Regardless of fund structure, risk is primarily associated with the underlying securities. Whether structured as a mutual fund or as an ETF, when buying a basket of securities, there will be some risk attached. But remember: there can be no reward without taking some risk.

Inherent Risks

Some of the potential risks associated with ETFs and mutual funds that invest in market-based securities (including fixed-income and equity funds) are:

- Currency risk
- Inflation risk
- Interest-rate risk
- Liquidity risk
- Market risk
- Country risk
- Credit risk

Similar to mutual funds, ETFs are susceptible to these standard market risks. But it is a mistake to think that ETFs have more risk than mutual funds because the level of potential risk arises from the underlying investment portfolio and not from the wrapper.

The Human Element

Actively managed funds are overseen and directed by a professional portfolio manager. These funds have a mandate that they must adhere to, but within that mandate, the portfolio management team selects, buys and sells the underlying securities. The portfolio manager's style, approach and strategy create risk related to human decision-making.

While index-based (passively managed) mutual funds have been available for many years, traditional mutual funds have tended to be actively managed. On the other hand, most ETFs (by far) have been index tracking; though, in recent years, non-index tracking ETFs have increasingly emerged in Canadian and global markets.

Focus on the Ingredients

If you were dining out in an unfamiliar restaurant and wanted to know how spicy a dish is you wouldn't ask if it's served in a bowl or on a plate, you'd ask about its ingredients. The same idea applies to the risk profile of ETFs and mutual funds because – by regulatory requirement – they must both use the same risk scale: 10-year rolling Standard Deviation (SD). No matter what the investment is, advisors and investors are best served if each investing decision is carefully considered based on the personal goals and circumstances of the investor, so that the product – whether mutual fund or ETF – meets the desired risk profile of his/her portfolio.

The Big Question: Could ETFs Cause a Market Crash?

As exchange-traded funds (ETFs) have continued to rise in popularity, oft-repeated myths can gain traction despite a clear lack of evidence. Investor education is important to the Canadian ETF Association (CETFA) mandate and that means overturning common misconceptions. We therefore need to dispel the old but lingering myth that ETFs could cause a market crash someday – or that they already have. This erroneous belief stems, in part, from the fast growth of ETFs as an accessible investment vehicle. At the end of 2022, $314 billion was invested in 1,299 Canadian-listed ETFs. As this asset total continues to grow, we believe it is increasingly important to ensure advisors and investors have the information they need to make informed decisions about how and why ETFs work.

Cause or Effect?

Some observers have argued that ETFs cause volatility and distort the price of their underlying securities but this is looking at the world upside-down. ETFs – like stocks and bonds – are market-dependent. When macroeconomic events, investor sentiment or other factors cause market fluctuations, ETFs move with the market. When market volatility increases, ETF trading tends to increase proportionately as well. However, the fluctuation should be understood as a symptom of market volatility – *not* a cause.

Size and Structure

While it's true that the ETF market is growing rapidly around the globe, it is still small relative to the total securities market. In Canada in 2022, ETFs represented about 19% of mutual fund assets.[48] In the United States (the world's largest market), ETFs only account for 12.6% of equity assets, in Europe, 7.5% and 3.9% in Asia-Pacific; for fixed-income assets, ETF the market shares are: U.S., 2.5%; Europe, 1.6%, and Asia-Pacific, 0.3%.[49] ETFs provide investors with easier, cost-effective access to markets and this has increased trading activity overall, but buying and selling associated with ETFs is still a fraction of the total market. Today, and in any imaginable future, it is the broader market that drives prices. Given the relative size of ETFs against the market as a whole, claims that they have the power to control market stability aren't credible.

Markets are complex, with many players and intricacies. Market crashes occurred before the advent of ETFs (and before COVID-19 and the international crisis in Eastern Europe) when they were small and were just rising in popularity. History shows that ultimately human behaviour is at the heart of every market crash from the Great Depression to the tech bubble of 2001-02 to the global financial crisis of mid 2007-09. None of these events was caused by one factor or one type of security. ETFs are an investment vehicle that allows people to buy and sell a diversified portfolio of stocks and bonds efficiently and typically at a lower cost compared to many alternatives. The investment vehicle itself does not influence broader market fluctuations.

Breaking it Down

The myth that ETFs could cause or magnify market volatility is debunked by three key characteristics.

1) Transparency. ETFs trade on a stock exchange throughout the day. Because pricing (and therefore investor sentiment), is continuously visible, ETFs can sometimes reflect price drops before they are apparent in an underlying security. It may appear that ETFs are causing the drop, but they are merely mirroring market sentiment.

2) Liquidity. When the price of an ETF falls, market makers can seek to take advantage of the price difference between the ETF shares and the price of their underlying assets by buying the ETF and selling the underlying assets. This trading is a response to market shifts, not a cause of them. This arbitrage

[48] CETFA rough estimation based on reported mutual fund AUM by IFIC to June 2023. Figure varies with time.
[49] Global ETF market facts: three things to know from Q4 2022, BlackRock iShares, Jan. 17, 2023, Samara Cohen, https://bit.ly/3Z2OyFr.

can also increase liquidity and help curb price volatility by bringing ETF share prices back in line with their underlying holdings.

3) Market Size. As noted, the ETF market is growing robustly, but remains a relatively small portion of the overall market. The impact of ETFs is therefore much lower than that of other, larger market influencers.

Liquidity – Tackling Misconceptions

As noted above, the Canadian ETF Association (CETFA) works continuously to debunk many of the myths that cling stubbornly to ETFs. Educating advisors about the mechanics, use and benefits of ETFs (e.g., liquidity, trading best practices, tax-efficiency, etc.) remains a key priority. The first and most common myth raised by advisors is that buying an ETF with low trading volume is dangerous because a lack of liquidity means a trade could potentially move the price.

In fact, unlike shares in publicly listed companies, ETFs do not have a fixed number of units outstanding – they're open-ended like mutual funds – which means new units can be created on demand. This structure supports small do-it-yourself investors and large institutional investors equally and is not subject to the same supply-demand liquidity profile.

Understanding the liquidity of an ETF is about more than just looking at the trading volume on your screen. With an ETF, there are two levels of liquidity: primary and secondary. An ETF's trading volume on an exchange – the portion that is visible – is only primary liquidity. More than that, you're likely only seeing the trading data from just one exchange – which means it could underrepresent the total trading volume from all marketplaces. Canada has two exchanges that list and actively trade ETFs: the TSX and CBOE Canada; the CSE continues to express an interest in listing ETFs.[50]

But there are actually a number of other markets that trade the same securities. While TSX and CBOE Canada data is delivered in real-time, the other markets' information is not always consolidated in a financial advisor's data terminal, so it's necessary to confirm that the information is complete and accurate. Many believe that if an ETF does not trade a specified number of shares daily (for example 50,000), the ETF is illiquid and should be avoided. This may be true for a single stock, but with ETFs, you

[50] Year-End 2022 Interview With Canadian Securities Exchange CEO Richard Carleton, : "…we are interested in the opportunity to list ETFs and structured products. Looking at some of the other markets in Canada, they have robust structured product and ETF offerings that attract a lot of new listing activity. …that has not been available to us in years past, and we hope to open that capability and compete on a level playing field with other exchanges in Canada for that business." 2022 Rewind, Dec. 15, 2022, Peter Murray, https://bit.ly/3FE508l.

need to look deeper. This is the key to understanding the difference between an ETF's primary and secondary liquidity.

Secondary liquidity pertains to the underlying basket of securities an ETF portfolio represents, which is captured through the creation/redemption process. This is one of the key features of ETFs: that the supply of shares is flexible – they can be "created" or "redeemed" to offset changes in demand. Liquidity in one market – primary or secondary – is therefore not indicative of liquidity in the other market. The creation-redemption process performs two important functions:

1) It creates liquidity for ETF shares by responding to the changing supply and demand needs of investors who trade on an exchange.

2) It helps keep an ETF's price per share close to the ETF's NAV.

This is the key operating mechanism for an ETF as the underlying stocks in the ETF portfolio determines the price at which an investor can buy or sell, often referred to as the spread, and therefore the ETF's trading volumes. In fact, there are many factors that affect the liquidity of an ETF, including the bid/ask spreads on the securities in the portfolio; how easy is it to buy or sell the underlying securities without affecting their price, and the depth of the order book to handle investor interest, i.e., the volume of pending ETF orders.

ETFs: A "New Technology" With a Strong Foundation

Prudent investors – and their advisors – want to know what they're investing in, the benefits, risks, how they work and what the tax implications are. With ETFs, they are getting a "new" technology that now has more than 30 years in the field. Since the first ETF began operating on the TSX on March 9, 1990, capital markets have experienced significant growth and (as expected) have weathered a variety of major downturns. A short list includes the "dotcom bomb" of the early 2000s, the Global Financial Crisis of 2007-09, the impact of COVID-19 in early 2020, Russia's invasion of Ukraine in 2022 plus the closure of two banks in the U.S. and the forced sale of another in Switzerland before the midpoint of 2023.

As a product class, ETFs have continued to grow and are increasingly embraced by investors around the world for their inherent strengths. Prudent investors should therefore question the myths that persist in some quarters about ETFs and learn more about what they have to offer because they are a "new" technology with an established track record.

Understanding Indexes: *The "Backbone" of ETFs*

Without indexes, exchange traded funds (ETFs) could not exist.

Indexes (also known as "indices") are essential analytical tools for all investing activities; they're also the "backbone" for all ETFs and other passive investments. Even actively managed ETFs begin with an index-based basket of securities: the manager then intervenes and makes adjustments to the weights (amounts) of specific securities (or groups of securities) based on a fund's stated investment goal.

Given their importance for ETFs and ETF investors, it's important to have a grasp of indexes: what they are and how they're used. For companies outside Canada considering launching new Canadian ETFs, becoming conversant with Canadian indexes is critical as they differ from those in other jurisdictions.

What You Really Need to Know

This section of the Guide shares core information and is not a detailed explanation of how specific indexes are defined, calculated and managed over time. Those factors include policy decisions (e.g., eligibility criteria, rules regarding exchange closures), calculation formulas (for market-capitalization, non-market capitalization and derived indexes), and administrative procedures (e.g., activities undertaken for index governance). Organizations whose indexes are deemed representative for a designated set of investment securities – S&P Dow Jones Indices, FTSE Russell, MSCI, etc. – publish comprehensive descriptions of index construction models, calculation methods and governance standards. Index protocols are periodically reviewed and updates are (typically) shared, along with all methodology details, through the sponsoring organizations' websites to ensure transparency.

An Index in a Nutshell

Indexes serve a variety of purposes. For example, they may act as economic indicators: the Consumer Price Index (CPI) is a measure of inflation. Other indexes provide benchmarks for assessing investment performance. They include the Dow Jones Industrial Average® (DJIA® or "The Dow®"), the S&P 500® and Nasdaq Composite in the U.S., the S&P/TSX Composite Index in Canada, and many others.

These are the indexes that matter to ETF investors. So, what key information do these performance indexes deliver?

> "An index is a group or basket of securities, derivatives, or other financial instruments that represents and measures the performance of a specific market, asset class, market sector, or investment strategy. In other words, an index is a statistically representative sampling of any set of

observable securities in a given market segment." (Source: S&P Dow Jones Indices - Index Literacy, An Investor's Guide to Indices – Chapter 1)

In a nutshell, and without delving into their detailed mechanics, indexes represent the combined value of their individual securities, proportionate to their size in the index. They give us an understanding of and a basis for consistently comparing changes in value over time. Indexes therefore offer a "big picture" of how a chosen set of investments defined by class, type, jurisdiction, etc. performs financially within a day, daily and over longer periods: a month, quarter, half-year, year and multiple years.

A Metric…Not an Investment in Itself

Many indexes are deployed around the world and what they measure is spelled out in detail. Some quantify the performance of a broad swath of investments, while others may only focus on sectors of an economy. You can find indexes that are specific to certain types of investments (stocks, bonds, commodities, etc.), as well as those that focus on geographically defined markets: Canada, the U.S., international. There are indexes that capture the performance of recognized investing styles: value, growth, etc., as well as specific niches, such as "green technology." The methods used to calculate the value of a given index even make it possible to back-test performance, i.e., to determine what the values would theoretically have been before the index was established.

What indexes do not deliver is an investment opportunity because you cannot invest directly in an index. The index provider is detached from any investment opportunity based on the index, even if another division of the same company that manages the index offers investment products/solutions.

However, an ETF – which is designed to track or mirror an index – does offer investors an opportunity to invest based on a specified index. Which index a Canadian ETF tracks is prominently identified in the ETF Facts summary document investors receive within two business days after they make their purchase.

Similar but Different: The Index Used has an Impact

How can two seemingly similar indexes produce different investment values? Unless indexes use exactly the same methodology, the returns will vary and maybe by a lot. As noted, specific rules govern an index's creation, calculation and maintenance. They determine which securities are in/out, how the index value is calculated, how the components are modified, and a timetable for updates. These factors are the foundation for determining index characteristics and performance. And they empower investors to choose among ETFs that seem similar but are different because of the indexes they track.

Major Canadian Indexes You Should Recognize

Indexes convey essential information for ETF investors and their advisors. Indexes may seem similar but will deliver different outcomes based on how they are constructed and how the values are calculated. They deliver invaluable context for sound and effective investment decision-making. The Index Industry Association (IIA) states that there are more than three million stock indexes worldwide.[51] However, there are a handful of domestic benchmark indexes Canadian ETF investors should be familiar with:

- **S&P/TSX Composite:** "Headline index" for Canadian equity markets. Launched Jan. 1, 1977; first value date Dec. 31, 1987. Measures performance of 266 representative stocks from 11 Canadian business sectors. Float-adjusted, market-cap weighted, rebalanced quarterly.
- **S&P/TSX 60:** Large-cap market segment of the Canadian equity market: 60 companies. Launched Dec. 31, 1998; first value date Nov. 13, 2001. Float-adjusted, market-cap weighted, rebalanced quarterly.
- **S&P/TSX SmallCap:** Canadian small-cap market; 224 companies (Jan. 31, 2023). Launched May 17, 1999; first value date November 14, 2001. Float-adjusted, market-cap weighted, rebalanced annually in September.
- **S&P/TSX Venture Composite Index:** Covers Canadian micro-cap securities; 152 companies (Jan. 31, 2023). Launched Dec. 10, 2001; first value date Dec. 14, 2001. Float-adjusted, market-cap weighted, rebalanced quarterly.
- **S&P Canada All Bond Index:** Comprehensive performance of fixed-income market: 1,323 constituents from S&P Aggregate Bond Index and S&P Canada High Yield Corporate Bond Index (Jan. 31, 2023). Launched Dec. 22, 2015; first value date Jan. 30, 1988. Market-value weighted; rebalanced monthly.
- **FTSE Canada Universe Bond Index:** Canadian-dollar denominated, investment-grade fixed-income market: Canadian government, quasigovernment and corporate. Minimums: $100 million issuance size, BBB rating, one year to maturity; at least 10 institutional buyers. Base value of 100 at Dec. 31, 1985; rebalanced daily.

[51] Sixth Annual Index Industry Association Benchmark Survey Reveals Continuing Record Breaking ESG Growth, Multi-Asset Expansion by Index Providers Globally, Index Industry Association (IIA), Nov. 1, 2022, https://bit.ly/3JVLYNg.

Conclusions: Next Steps

Thank you for reviewing the Guide to the Canadian ETF Industry – *A Road Map*. The CETFA hopes that you found it a useful resource for learning about the sector and the product.

As stated in the introduction, the Guide was originally prepared by the CETFA to provide financial professionals in Canada and internationally, as well as individual investors, with a solid overview of the Canadian ETF industry as ETFs celebrated their 30th year of operation in 2020. The CETFA aims to update its content semi-annually (if/as feasible) to ensure the Guide remains as accurate and as current as possible.

The Canadian ETF Industry is constantly changing, so some of the numerical information in this guide will inevitably become dated quickly and/or vary depending on sources consulted. However, it should offer a valid picture of a sector and a product on a long-term upward trajectory despite occasional lulls and even the odd setback. It is a growth curve driven and sustained by a strong community of providers and increasing acceptance among investors seeking a cost-effective way of pursuing capital gains or securing an alternative source of income in a persistent low-interest environment.

This guide is intended to be an entry point. Ongoing education/learning about ETFs will remain essential to stay informed about new product development, regulatory change and evolving practices and standards. The CETFA website (cetfa.ca) is an excellent resource for getting this knowledge; other helpful sources are listed below.

Your inquiries and comments on this guide are welcomed. Please see our contact details on the back.

Additional Resources

Canadian ETF Association
cetfa.ca

Canadian Securities Administrators (CSA)
securities-administrators.ca

A Comprehensive Guide to Exchange-Traded Funds (ETFs), Joanne M. Hill, Dave Nadig, and Matt Hougan, CFA Institute Research Foundation, 2015
cfainstitute.org/en/research/foundation/2015/a-comprehensive-guide-to-exchange-traded-funds-etfs

ETFs, GetSmarterAboutMoney/Ontario Securities Commission
getsmarteraboutmoney.ca/invest/investment-products/etfs

etf.com, U.S.-based ETF information site
etf.com

etfdb.com, U.S.-based ETF information site
etfdb.com

ETFGI.com, Independent research and consulting firm covering global ETFs
etfgi.com

ETF Trends, U.S.-based ETF information site
etftrends.com

Investment Company Institute Exchange-Traded Funds Resource Center, U.S.-based ETF information site
ici.org/etf_resources

Glossary

Adjusted Cost Base (ACB): How much an #investor paid for an #investment, as well as any added costs, e.g., fees and commissions.

Alpha: A measure of performance on a risk-adjusted basis that identifies how much an investment outperforms an index or benchmark.

Benchmark: The standard (or index) used to measure an ETF's performance.

Beta: The return of an investment compared to a market index: most ETFs are beta funds and are designed to track the return of an index.

Bid/Ask Spread: The difference (spread) between bid and ask prices.

Capital gains: A tax on profits made when a capital asset is sold for a higher price than what it was bought for.

iNAV: Indicated net asset value measures the intraday net asset value (NAV) of an investment and shows the changing value of the investment throughout the day.

Liquidity: The ability of an asset to be bought/sold without affecting its price. Liquidity is indicated by a high level of trading activity. Assets that are easily bought/sold are "liquid assets."

Management Expense Ratio (MER): Measures how much of a fund's assets are used for management and operating expenses; the MER is paid to the fund manager.

NAV: Gross assets of an ETF minus its liabilities; usually calculated at the end of each trading day.

NAVPU: Gross assets of an ETF minus its liabilities divided by the number of units outstanding.

Standard Deviation (SD): Measures the spread of data points compared to the average for the data. Standard deviation is used to depict rolling returns (annualized average returns) for a specified period.

Tracking Error: Measures an ETF’s performance versus its target index. It’s typically presented as the standard deviation (SD) of performance differences over time and is usually small, e.g., a few tenths of one per cent.

A NOTE TO READERS

The contents of this guide have been developed on the basis of sources believed to be reliable and/or have been provided on a volunteer basis by subject matter experts in their respective fields. This guide does not deliver nor is it a substitute for informed advice from a regulated and properly credentialled professional. Past performance is not an indication of future performance. Consult your financial advisor before making any investment decision.

CANADIAN ETF ASSOCIATION
151 Yonge Street, Suite #1100
Toronto, Ontario
M5C 2W7
(647) 256-6637
info@cetfa.ca