YOUR GUIDE TO

ETF Investing

Fall 2024

IN THIS ISSUE

Investing in data centres - A revolutionary technology or a bubble?

Debunking ETF trading myths

Empowering the future

FundGrade A+® Award ETF Winners for 2023

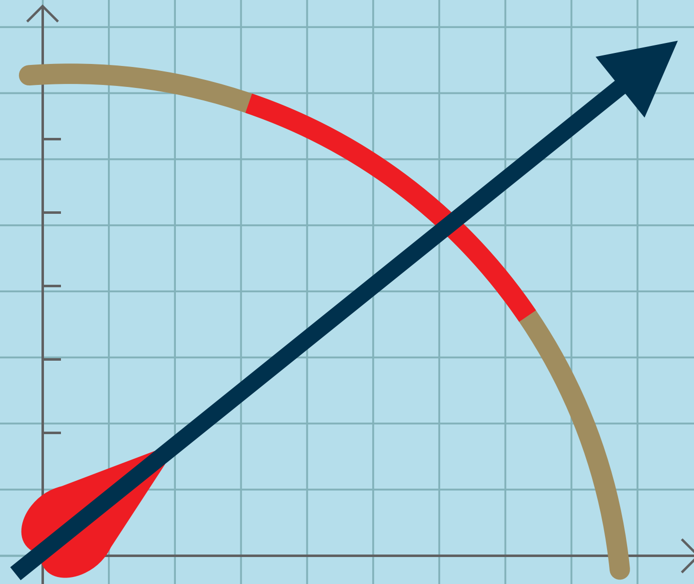
PLUS:

A Directory of ETF Providers and Related Professionals

Sponsored by:

TD Asset Management

NATIONAL BANK INVESTMENTS



Add another arrow to your quiver

Go beyond traditional assets to broaden diversification and see how infrastructure and alternative ETFs can fit into your portfolio.

NALT	NGPE	NREA
Liquid Alternatives	Global Private Equity	Global Real Assets

nbinvestments.ca/etf

NBI Exchange-Traded Funds (the "NBI ETFs") are offered by National Bank Investments Inc., a wholly owned subsidiary of National Bank of Canada. Management fees, brokerage fees and expenses all may be associated with investments in NBI ETFs. Please read the prospectus or ETF Facts document(s) before investing. NBI ETFs are not guaranteed, their values change frequently and past performance may not be repeated. NBI ETFs units are bought and sold at market price on a stock exchange and brokerage commissions will reduce returns. NBI ETFs do not seek to return any predetermined amount at maturity.

® NATIONAL BANK INVESTMENTS is a registered trademark of National Bank of Canada, used under licence by National Bank Investments Inc.

© National Bank Investments Inc., 2024. All rights reserved. Any reproduction, in whole or in part, is strictly prohibited without the prior written consent of National Bank Investments Inc.

National Bank Investments is a signatory of the United Nations-supported Principles for Responsible Investment, a member of Canada's Responsible Investment Association, and a founding participant in the Climate Engagement Canada initiative.

Guest Editorial

Dear CETFA Members and the Canadian ETF Community,

Ron Landry

Serving as the new Chair of the Canadian ETF Association (CETFA) is a privilege. I sincerely thank each of you for your trust and support.

My vision is for CETFA to be the leading voice in the Canadian ETF industry. I'm committed to supporting initiatives that drive growth and promote the sustainability and integrity of Canada's ETF industry.

The ETF market in Canada is thriving, with over $450 billion in assets under management across nearly 1,200 ETFs. ETFs have become an essential tool for advisors and investors, offering diversification, cost-efficiency, and transparency. We continue to see new ETF providers and products coming to market in Canada. They provide investors access to various asset classes and investment strategies, enabling more informed and flexible investment decisions.

As Chair, I'm dedicated to advocating for our industry and working with regulators, policymakers, and other stakeholders for a favourable environment for ETFs in Canada. A key focus for us moving forward will be to promote the growth, use, education, sustainability and integrity of ETFs in Canada's ETF industry. Our collective efforts will help ensure that the Canadian ETF market remains dynamic, innovative, and responsive to the evolving needs of investors.

Of course, one of CETFA's core pillars is promoting ETF education. We are dedicated to providing valuable resources and insights to help advisors and investors make informed decisions. By enhancing our educational initiatives, we aim to empower our community with the knowledge needed to navigate the evolving financial landscape and maximize the benefits of ETFs.

Together, we are shaping the future of our industry in Canada for the next generation.

Thank you once again for your support.

Ron Landry
Chair,
The Canadian ETF Association
www.CETFA.ca

TABLE OF CONTENTS

Investing in data centres - A revolutionary technology or a bubble?
by Juliana Faircloth & Evan Chen 5

ETFs in Canada 7

Top performing ETFs 7

FundGrade A+® Award ETF Winners 8

ETFs: Where the money goes
by Brian Bridger 9

Debunking ETF trading myths 10

Directory of ETF Providers and Related Professionals 11

CETFA's mandate is to support the growth, sustainability and integrity of Canada's ETF industry.

For more information contact
Amanda Lopez
Senior Account Executive
416-494-1440 x239
amanda@cetfa.ca

CETFA Members

Affiliate Members

cetfa.ca

CONTRIBUTORS

Ron Landry
Chair, **Canadian ETF Association** (CETFA).

Juliana Faircloth
Vice President, Portfolio Research Manager
TD Asset Management Inc. (TDAM)

Evan Chen
Associate, Portfolio Research
TD Asset Management Inc. (TDAM)

Brian Bridger, CFA, FRM
Senior Vice President, Analytics & Data
Fundata

YOUR GUIDE TO ETF INVESTING IS PUBLISHED BY BRIGHTS ROBERTS INC.

Ian Roberts
ian@brightsroberts.com

Brights Roberts Inc.
305 - 500 Duplex Avenue
Toronto, Ontario M4R 1V6

For advertising/editorial inquiries call 416-485-0103

www.brightsroberts.com

Your Guide to **ETF Investing**©
© Copyright 2024 Brights Roberts Inc. All Rights Reserved

The statements and statistics contained in this publication were obtained from sources believed to be reliable, but we cannot represent that they are accurate or complete. This material is published for general information only. The publishers assume no liability for financial or other decisions based on this information. Readers should obtain professional advice before applying any ideas mentioned to their own personal situation to ensure their individual circumstances have been properly considered. E&OE October 2024

Investing in data centres - A revolutionary technology or a bubble?

Having the foresight to see trends, future opportunities and challenges is part of the foundation of any successful investment team. Lately, there has been a lot of talk about data centres (DCs) in the investment world, and for good reason. We are at the cusp of what is set to be a huge technological infrastructure build out, boosted by the prospects of artificial intelligence (AI) and a completely new way for humans to leverage data.

The data on DCs

Before we take a deep dive into the dynamics and implications of DCs, let's set-up the groundwork for what DCs are and how they have morphed into something that (while is behind the scenes) is increasingly an important aspect of our economy.

Simply stated, DCs are a physical location that store computing machines. They contain computing infrastructure, such as servers, data storage drives, and network equipment. They can vary considerably in size. Small DCs can be less than 5,000 square feet, while the largest hyperscalers (large scale DCs) can span 57 football fields.

Juliana Faircloth

Vice President, Portfolio Research Manager

TD Asset Management Inc.

Evan Chen

Associate, Portfolio Research

TD Asset Management Inc.

The exodus of the data

Servers were always around. They were often found in storage rooms or basements of office buildings. But this left something to be desired. Enter the cloud. With the advent of cloud technology, companies could now rent computing power from someone else instead of managing it on their own premises. This technological advancement was driven by the need for more compute and the rise of large DC providers such as Amazon, Microsoft and Google and was welcome by many companies for three key reasons:

1. **Flexibility** – Capacity can be tweaked higher or lower based on customer needs. This can be very helpful when evaluating whether a business wants to try a new feature but doesn't want to purchase an additional server.

2. **Scalability** – A growing company can grow without having to buy new servers. An example of this is Netflix who went from 10 million to 260 million users. You can't budget for hypergrowth, and this allows you to add new capacity quickly.

3. **Affordability** – Efficiencies of scale means in general things will be cheaper. The hyperscalers are able to pass on these savings to the customer.

Computing power is not new but having it as infrastructure in such large amounts is. The hyperscalers are driving efficiencies of scale and have created a whole new industry and specialization. This amount of compute never existed before because it was so decentralized but now with the centralization of it, we have the capability to do more complex tasks, like AI. This trend is spurring a retooling of spending, building and investment and has been reflected in higher equity prices, which have many asking whether we are in a DCs equity bubble or not?

Technological revolutions and bubbles

Before we get into the merits of whether we feel we are in a technological bubble, it's important to provide some initial thoughts on the impact of a bubble, particularly a technological one. Bubbles sound bad, and often are. They can mean significant financial loss for investors and the public and can lead to recessions (even depressions). However, in cases where there is advent of productive technology, they can actually serve a purpose.

Financial bubbles are a tool for propagating and deploying new technology. They help overcome the "chicken and egg scenario" that can come with investing in new technologies. An example of this that we are seeing today is the need for electric vehicles (EV). EV charging infrastructure is required to increase EV users and market penetration, but we need EV penetration to make investments in EV charging infrastructure.

A bubble or still a long runway?

To help determine if we feel we are really in a bubble or the early stages of a massive technological build out, it's helpful to explore the various rationales and evidence available to us.

Evidence of a possible bubble:

1. **A tendency to overbuild** - Drawing parallels from prior

Continued on page 6

Investing in data centres - A revolutionary technology or a bubble?

Continued from page 5

bubbles can provide some useful insight from the past. For example, the railway mania in the U.K. in the 1840s or internet bubble in the U.S. in the 1990s/2000s suggests societies tend to overbuild new technological infrastructure.

2. We may be over-valuing already - Bubbles occur when financial market reality detaches from economic reality and there may be instances where we are seeing this already. This is evidenced in companies with a very small exposure to the DCs supply chain that have been re-rated materially as a "data centre play".

3. We may be over-hyping AI - There is a possibility that we are overhyping AI and what the future looks like from a technological standpoint. One way we may be overhyping AI is that there hasn't been any sort of revolutionary app yet. For instance, ChatGPT initially gained a lot of popularity but growth in users has somewhat plateaued[1]. We have seen over-hype by big tech before with the Metaverse investment at Meta, Amazon overbuilding warehouses during the pandemic thinking brick and mortar would never come back. Another factor that could also put the brakes on AI includes regulation. While there is not a ton of regulation around AI yet, this is an area that is likely to be targeted by regulation to maintain security, safety and perhaps protect employment. If AI growth does not materialize to the levels many feel it may reach, the need for DCs may slow.

Not a bubble:

1. We are spending productively - Hyperscaler investment in cloud infrastructure has grown at a 25% compound annual growth rate (CAGR) since 2015. This spending has not been for nothing, cloud revenue at the hyperscalers has grown at a 40% CAGR during the same time frame. This is clearly productive spending with a return.

2. We underestimate the potential of new technologies - Society often underestimates the potential externalities of new, revolutionary technologies like AI. Again, using rail and internet as examples, it was not conceivable in the early days of rail and early days of internet that externalities would extend well beyond the intended use cases. Rail resulted in improved manufacturing output (U.K. became about 25% of global exports, doubling over 50 years and cementing the country as a global economic powerhouse), but also allowed for a national postal service, faster communication, and a boom in leisure travel. The internet resulted in better and faster access to information and communication but also paved the way for entirely new business models including Amazon, Facebook, Google. The sharing economy was made possible by the invention of internet. Today, you no longer need to own an asset to use it – Uber, Airbnb, Netflix.

3. We are limited by bottlenecks - Demand for DCs is currently outstripping supply and there are bottlenecks in the supply chain that limit explosive growth and over-investment. Some of these bottlenecks include labour, electrical equipment, power, permits and environmental permits.

Investment implications

DCs are generational infrastructure and are the backbone to the AI buildout. Many parts of the DC supply chain are already seeing good returns on their investments and bottlenecks are keeping a lid on overly explosive growth. With this, it's hard to feel like we are in a bubble. From an investing standpoint, there are real implications for all asset classes whether its real estate where DCs have been one of the best performing industry groups, or infrastructure where renewable power assets stand to benefit from growing demands on the grid.

Thorough fundamental analysis can uncover underappreciated stocks that stand to benefit beyond just mega cap tech. The Magnificent 7 stocks catch all the attention of outperformance related to this trend, however there are several DC equities across the supply chain that have kept pace or even outperformed the Magnificent 7 with less attention. It is important for investors to pay mind to broad themes that touch many aspects of the economy. For DCs, this theme encompasses companies in technology and semiconductors but also industrials, real estate, utilities, energy, and materials.

Gaining exposure in your portfolio

There are several ways investors can gain exposure to the opportunities presented by growth in DC spend and our power-hungry world through exchange-traded funds (ETFs). For instance, an investment in **TD Active Global Real Estate Equity ETF** (TGRE) provides an investor direct exposure to DCs through equities like Equinix and Digital Realty. **TD Active Global Infrastructure Equity ETF** (TINF) provides exposure to utilities and power providers that are seeing broad investment in grid infrastructure, renewable power and even natural gas pipelines. **TD Active Global Enhanced Dividend ETF** (TGED) and **TD Active U.S. Enhanced Dividend ETF** (TUED) are diversified active equity ETFs that often express a view on underappreciated secular growth themes – DC spending being one of them.

For more timely market insights and information about our products, visit us at **td.com/etfs** or follow us on LinkedIn at **linkedin.com/showcase/tdassetmanagement/**

[1] *The Wrap, Alex Kantrowitz. "ChatGPTs Growth is Flatlining"*

Commissions, management fees and expenses all may be associated with investments in exchange-traded funds (ETFs). Please read the prospectus and ETF Facts before investing. ETFs are not guaranteed, their values change frequently and past performance may not be repeated. ETF units are bought and sold at market price on a stock exchange and brokerage commissions will reduce returns.

Certain statements in this document may contain forward-looking statements ("FLS") that are predictive in nature and may include words such as "expects", "anticipates", "intends", "believes", "estimates" and similar forward-looking expressions or negative versions thereof. FLS are based on current expectations and projections about future general economic, political and relevant market factors, such as interest and foreign exchange rates, equity and capital markets, the general business environment, assuming no changes to tax or other laws or government regulation or catastrophic events. Expectations and projections about future events are inherently subject to risks and uncertainties, which may be unforeseeable. Such expectations and projections may be incorrect in the future. FLS are not guarantees of future performance. Actual events could differ materially from those expressed or implied in any FLS. A number of important factors including those factors set out above can contribute to these digressions. You should avoid placing any reliance on FLS.

TD ETFs are managed by TD Asset Management Inc., a wholly-owned subsidiary of The Toronto-Dominion Bank. ®The TD logo and other TD trademarks are the property of The Toronto-Dominion Bank or its subsidiaries.

ETFs in Canada

ETF Assets Under Management by ETF Provider

ETF Provider	No. of ETFs	AUM ($million)
BlackRock Canada	145	120,697
BMO Asset Management	152	114,698
Vanguard Canada	37	64,122
Horizons ETFs	125	34,512
CI Investments	86	21,440
TD Asset Management	42	16,873
Mackenzie	53	14,664
National Bank	16	12,234
Purpose Investments	53	10,364
Fidelity	50	8,428
RBC Global Asset Management	52	7,294
Invesco ETFs	38	6,917
Scotia Global Asset Mgmt	30	6,134
Hamilton ETFs	20	5,400
Desjardins Investments	22	3,998
Harvest Portfolios	24	3,963
CIBC Asset Management	36	3,752
Evolve Funds	28	3,714
Manulife Investment Mgmt	20	3.401
PIMCO Canada	6	2,789
Franklin Templeton	23	1,643
AGF Investments	12	952
Picton Mahoney Asset Mgmt	8	841
Brompton Funds	14	799
31Q	2	741
Ninepoint Partners	8	594
Middlefield	6	522
Guardian Capital LP	17	485
First Trust Portfolios Canada	23	482
Bristol Gate Capital Partners	2	195
IA Clarington	8	125
Mulvihill Capital Management	2	113
Arrow Capital Management	4	96
Lysander Funds	3	92
Accelerate Financial	4	69
Russell Investments Canada	3	63
Starlight Investments	2	20
Forstrong Global Asset Management	4	16
Tralucent Asset Management	1	9
Caldwell	1	5
Quadravest Capital Management	1	-
Total	**1,183**	**473,256**

Source: CETFA Monthly Report, as at July 31, 2024

Top Performing ETFs

Canadian Equity

ETF Name	1 Year Return
Global X Inovestor Canadian Equity Index ETF	24.49%
NBI Sustainable Canadian Equity ETF	24.03%
iShares MSCI Min Vol Canada Index ETF	22.54%
Mackenzie Maximum Diversification Can. Index ETF	22.35%
NBI Canadian Family Business ETF	22.13%

Source: Fundata as at July 31, 2024

Top Performing ETFs

U.S. Equity

ETF Name	1 Year Return
Fidelity U.S. Momentum ETF US$	40.73%
Fidelity U.S. Momentum ETF	40.10%
TD Active U.S. Enhanced Dividend ETF U$	37.02%
TD Active U.S. Enhanced Dividend ETF	36.65%
TD Active U.S. Enhanced Dividend CAD Hedged ETF	35.21%

Source: Fundata as at July 31, 2024

Top Performing ETFs

Canadian Short Term Fixed Income

ETF Name	1 Year Return
Manulife Smart Short-Term Bond ETF	9.29%
Desjardins 1-5 year Laddered Can. Corp. Bond Index ETF	9.10%
iShares Core Can. Short Term Corporate Bond Index ETF	9.08%
BMO Short Corp. Bond Index ETF Accumulating Units	9.07%
Fidelity Can. Short Term Corporate Bond ETF	9.06%

Source: Fundata as at July 31, 2024

Top Performing ETFs

Global Corporate Fixed Income

ETF Name	1 Year Return
BMO Mid-Term US IG Corp. Bond Index ETF - USD Units	9.91%
BMO Mid-Term US IG Corp. Bond Index ETF - CAD Units	9.61%
Shares U.S. IG Corp. Bond Index ETF U$	9.32%
CI Investment Grade Bond ETF - Hedged US$ Common Units	9.22%
iShares U.S. IG Corp. Bond Index ETF C$	8.89%

Source: Fundata as at July 31, 2024

Presented for information purposes only. Not intended as personalized investment advice. Securities mentioned are not guaranteed and carry risk of loss.

Award-winning ETFs for 2023

The FundGrade A+® Award is given annually to investment funds and their managers who have shown consistent, outstanding, risk-adjusted performance through the year. As such, the FundGrade A+ Award provides investors, advisors, and fund managers with a single, reliable, easy-to-understand fund-performance rating based on up to 10 years of history.

The following are award-winning ETFs by CIFSC category for 2023

Alternative Equity Focused
- Horizons Global Uranium Index ETF (HURA)

Alternative Multi-Strategy
- NBI Liquid Alternatives ETF (NALT)

Canadian Dividend & Income Equity
- iShares Core MSCI Canadian Quality Dividend Index ETF (XDIV)
- Dynamic Active Canadian Dividend ETF (DXC)
- Horizons Cdn High Dividend Index ETF (HXH)
- TD Q Canadian Dividend ETF (TQCD)
- Vanguard FTSE Canadian High Dividend Yield Index ETF (VDY)

Canadian Equity
- iShares MSCI Min Vol Canada Index ETF (XMV)
- iShares S&P/TSX 60 Index ETF (XIU)
- BMO Low Volatility Canadian Equity ETF (ZLB)
- Desjardins RI Canada Multifactor – Net-Zero Emissions Pathway ETF (DRFC)
- Fidelity Canadian Value ETF (FCCV)
- Horizons S&P/TSX 60 Index ETF (HXT)
- Invesco FTSE RAFI Canadian Index ETF (PXC)
- Manulife Multifactor Canadian Large Cap Index ETF (MCLC)
- NBI Sustainable Canadian Equity ETF (NSCE)
- Vanguard FTSE Canada Index ETF (VCE)

Canadian Fixed Income
- BMO Discount Bond Index ETF (ZDB)
- BMO Mid Provincial Bond Index ETF (ZMP)
- CI Yield Enhanced Canada Aggregate Bond Index ETF (CAGG)
- Dynamic Active Tactical Bond ETF (DXB)
- Evolve Active Core Fixed Income Fund Unhedged ETF (FIXD)
- Mackenzie Core Plus Canadian Fixed Income ETF (MKB)
- Manulife Smart Core Bond ETF (BSKT)

Canadian Corporate Fixed Income
- iShares Canadian HYBrid Corporate Bond Index ETF (XHB)
- CI Canadian Convertible Bond ETF (CXF)
- Manulife Smart Corporate Bond ETF (CBND)

Canadian Long Term Fixed Income
- BMO Long Corporate Bond Index ETF (ZLC)

Canadian Short Term Fixed Income
- iShares Core Canadian Short Term Corporate Bond Index (XSH)
- BMO Short Corporate Bond Index ETF (ZCS)
- Dynamic Active Investment Grade Floating Rate ETF (DXV)
- Horizons Active Ultra-Short Term Investment Grade Bond ETF (HFR)
- Invesco 1-5 Year Laddered Investment Grade Corp Bond Index ETF (PSB)
- TD Select Short Term Corporate Bond Ladder ETF (TCSB)
- Vanguard Canadian Short-Term Corporate Bond Index (VSC)

Canadian Small/Mid Cap Equity
- Manulife Multifactor Canadian SMID Cap Index ETF (MCSM)

Emerging Markets Equity
- CI WisdomTree Emerging Markets Dividend Index ETF (EMV.B)
- Desjardins RI Emerging Markets Multifactor – Net-Zero Emissions Pathway ETF (DRFE)

European Equity
- iShares MSCI Europe IMI Index ETF (XEU)
- BMO Europe High Dividend Covered Call Hedged to CAD ETF (ZWE)
- BMO MSCI Europe High Quality Hedged to CAD Index ETF (ZEQ)
- Horizons Europe 50 Index ETF (HXX)

Financial Services Equity
- iShares Equal Weight Banc & Lifeco ETF (CEW)
- Hamilton Australian Bank Equal-Weight Index (HBA)
- Hamilton Canadian Bank Mean Reversion Index (HCA)

Global Corp Fixed Income
- Horizons Active Ultra-Short Term US Investment Grade Bond ETF (HUF)

Global Equity
- iShares MSCI World Index ETF (XWD)
- BMO MSCI All Country World High Quality Index ETF (ZGQ)
- BMO MSCI Global ESG Leaders Index ETF (ESGG)
- Horizons Active Global Dividend ETF (HAZ)
- Mackenzie Global Sustainable Dividend Index ETF (MDVD)
- TD Active Global Enhanced Dividend ETF (TGED)
- TD Active Global Equity Growth ETF (TGGR)
- TD Growth ETF Portfolio (TGRO)
- TD Q Global Dividend ETF (TQGD)

Global Equity Balanced
- iShares Core Growth ETF Portfolio (XGRO)
- BMO Growth ETF (ZGRO)
- Fidelity All-in-One Growth ETF (FGRO)
- Mackenzie Growth Allocation ETF (MGRW)
- Vanguard Growth ETF Portfolio (VGRO)

Global Fixed Income Balanced
- iShares ESG Conservative Balanced ETF Portfolio (GCNS)
- BMO Conservative ETF (ZCON)
- Mackenzie Conservative Allocation ETF (MCON)
- TD Conservative ETF Portfolio (TCON)

Global Fixed Income
- BMO Short-Term US TIPS Index ETF (ZTIP)
- BMO Short-Term US Treasury Bond Index ETF (ZTS)
- Mackenzie US TIPS Index ETF (CAD-Hedged) (QTIP)

Global Infrastructure Equity
- iShares Global Infrastructure Index ETF (CIF)
- BMO Global Infrastructure Index ETF (ZGI)

Global Neutral Balanced
- iShares Core Balanced ETF Portfolio (XBAL)
- iShares ESG Balanced ETF Portfolio (GBAL)
- Fidelity All-in-One Balanced ETF (FBAL)
- Fidelity Global Monthly High Income ETF (FCGI)

International Equity
- iShares MSCI EAFE Index ETF (CAD-Hedged) (XIN)
- BMO International Dividend Hedged to CAD ETF (ZDH)
- BMO MSCI EAFE Hedged to CAD Index ETF (ZDM)
- Fidelity International Value ETF (FCIV)
- Mackenzie International Equity Index ETF (CAD-Hedged) (QDXH)
- TD International Equity CAD Hedged Index ETF (THE)
- Vanguard FTSE Dev All Cap ex North America Index ETF (CAD-hedged) (VI)
- Vanguard FTSE Developed All Cap ex U.S. Index ETF (CAD-hedged) (VEF)
- Vanguard FTSE Developed ex North America High Dividend Yield Index ETF (VIDY)

North American Equity
- Wealthsimple North America Socially Responsible Index ETF (WSRI)

Preferred Share Fixed Income
- Dynamic Active Preferred Shares ETF (DXP)
- TD Active Preferred Share ETF (TPRF)

Real Estate Equity
- CI Canadian REIT ETF (RIT)
- Horizons Equal Weight Canada REIT Index ETF (HCRE)
- Middlefield Real Estate Dividend ETF (MREL)

U.S. Equity
- BMO MSCI USA High Quality Index ETF (ZUQ)
- BMO S&P 500 Index ETF (ZSP)
- CI WisdomTree U.S. Quality Dividend Growth Index ETF (DGR.B)
- Fidelity U.S. High Quality Index ETF (FCUQ)
- Fidelity U.S. Low Volatility ETF (FCUL)
- Fidelity U.S. Value Currency Neutral ETF (FCVH)
- Fidelity U.S. Value ETF (FCUV)
- Horizons NASDAQ-100 Index ETF (HXQ)
- Invesco NASDAQ 100 Index ETF - CAD Hedged (QQC.F)
- RBC Quant U.S. Dividend Leaders ETF (RUD)
- Vanguard S&P 500 Index ETF (VFV)
- Vanguard U.S. Dividend Appreciation Index ETF (VGG)

U.S. Small/Mid Cap Equity
- BMO S&P US Mid Cap Index ETF (ZMID)
- CI Morningstar US Momentum Index ETF (YXM)
- TD Q U.S. Small-Mid-Cap Equity ETF (TQSM)

© 2024 Fundata Canada Inc. All rights reserved.

ETFs: Where the money goes

Brian Bridger
CFA, FRM

Investing is a numbers game. Prices, performance metrics, statistics are the daily meat and potatoes of investors, analysts, and managers. But numbers can tell us a lot not just about investment performance of a single security, but also the state of entire markets. The Canadian exchange-traded fund (ETF) market is a case in point.

In fact, the world's first ETF was created in Canada in 1990. From that modest beginning, the Canadian ETF market today has grown to 1,496 funds. And assets under management are north of $450 billion, a 150% increase over the past five years, or a 20% compounded annual growth rate.

Equity-based ETFs dominate

The largest percentage of Canadian ETFs are equity-based, at 61% (911 funds). Fixed Income funds form that next largest category at 25%. A much smaller portion of the market share is claimed by Alternative funds at 6%, Balanced at 4%, Commodities at 2%, and finally Cash, which includes money market and high interest savings funds, making up 2%.

Equity ETFs include all funds that primarily invest in equity securities as well as derivatives with exposure to equity markets. These exclude alternative funds such as long-short equity strategies. In the equity space, factor-based strategies account for the largest group of funds, at close to a 40% share. And while factors can include things like growth, momentum, and quality, the largest factor strategy belongs to dividend funds, which make up over 30%. Another popular factor is low volatility (10%). At the other end of the spectrum there is one ETF that is based on gender diversity metrics.

Sector-based ETFs account for 27% of the equity universe, with technology funds comprising 24% of this category, while financials make up 21%. Broad market ETFs, which can be both index-based or actively managed, make up 29% of the equity funds, with U.S.-focused funds accounting for 37% and Canadian funds at less than half of that, at just 14%.

Fixed-income ETFs invest primarily in investment-grade government and corporate bonds, as well as emerging market debt, high-yield bonds, and preferred shares. Geographically, Canadian-focused funds make up 44% of this category, while U.S. funds take a 28% share, and global funds at 20%. In the fixed-income category, 59% of funds are actively managed, while 40% are index based.

In recent years, **non-conventional investment strategies** (e.g., short-selling and other forms of leverage, derivative contracts, and so on) dubbed "Alternative" investments, have become increasingly popular with money managers and more sophisticated investors. Accordingly, financial markets, being endlessly innovative, introduced **Liquid Alternative funds** to make such strategies more easily available to investors. These funds now make up 12% of all Canadian ETFs. Within the category, cryptocurrency funds make up 22%. While 16% are funds using Passive/Inverse Leveraged strategies.

From a **currency perspective**, 86% of all ETFs are denominated in Canadian dollars with the remainder denominated in U.S. dollars.

Responsible Investment (RI) funds, as defined by the Canadian Investment Funds Standards Committee (CIFSC), make up almost 8% of all ETFs. The majority of these are Equity funds, at 74%, while Fixed Income funds account for 20%.

Fees and performance of ETFs

Looking at fees, Equity ETFs have an average management expense ratio (MER) of 0.62%, and Fixed Income funds average 0.45%. Active Equity funds average 0.90%, index-based funds average 0.44%, and rules-based funds average 0.62%. In the Fixed Income space, index ETFs have an average MER of 0.25% while active funds average 0.62%. Alternative funds have the highest average MER, at 1.42%. When comparing ETF fees with mutual funds, it is important to keep in mind that MERs do not include any brokerage fees that can be associated with buying and selling ETFs.

So what does all of this mean for performance? Year to date (YTD) to the end of July, Equity ETFs on average, have gained 13.4%. Fixed Income funds are up 3.9%, and Cash funds made 3.2%. Of the Equity funds, U.S.-focused funds lead the way at 15.7% YTD, followed by Global funds at 13.0%, and then Canadian at 10.6%. Over the past 3 years, U.S. funds still lead the way, with an average annual compounded rate of return of 7.6%, followed by Canadian funds at 7.1% and then Global funds at 4.8%. Of the three groups, Canadian funds were the least volatile, with a standard deviation (SD) of 15.0%, more than 2 percentage points lower than the U.S. funds and 3 percentage points lower than global funds.

Responsible Investment funds' performance has been similar to non-RI funds so far in 2024. The only material difference was in the Fixed Income space, where non-RI funds outperformed with a YTD return of 4.0% compared with 2.8% for RI funds. Over the longer term, non-RI funds outperformed across most asset classes and geographical regions. Equity funds delivered an average annualized 3-year return of 6.4% compared with 5.5% for RI funds. Fixed Income funds produced a 0.1% annualized return in the same period, while RI Fixed Income funds lost an average 0.8% annually. And Balanced non-RI funds outperformed their RI counterparts by 50 basis points. RI equity funds did experience lower volatility over the past 3 years, with a SD of 15.9% compared with 16.6% for non-RI funds.

© 2024 by Fundata Canada Inc.

Brian Bridger, CFA, FRM, CFA, FRM, is Senior Vice President, Analytics & Data, at Fundata Canada Inc. and is a member of the Canadian Investment Funds Standards Committee (CIFSC). This article is not intended as personalized investment advice. Securities mentioned are not guaranteed, involve risk of loss, and are subject to commissions.
www.fundata.com

Debunking ETF trading myths

ETFs have gained widespread acceptance, and like any new product, while many benefits are understood; there are misconceptions that need to be addressed

Low trading volume of an ETF does not mean poor liquidity

The daily trading volume of an ETF is not an accurate reflection of its liquidity. This is a result of the involvement of the designated market maker whose core responsibility is to maintain an inventory of units of the ETF and provide liquidity for investors to buy and sell when they choose to do so, without concern. The market maker ensures there is always a buyer or seller for the investor at an accurate price.

The designated market maker will also attempt to maintain a tight bid/ask spread so that the price of the ETF closely approximates the net asset value (NAV) per unit throughout the trading day.

Generally, the only factor which could affect the liquidity of an ETF is the liquidity of its underlying portfolio of securities. That is to say, if the ETF invests in securities that are difficult to buy or have low supply, then the market maker may have difficulty buying or selling those securities. This could affect their ability to subscribe for, or redeem, units of the ETF.

Generally, ETFs in Canada have portfolios that are restricted to investing only in liquid securities that trade on North American exchanges, which generally ensures that the price of the ETF closely reflects the value of the underlying portfolio.

Market orders are not always executed at the listed bid/ask prices

There is no guarantee that the order you place with an online broker or advisor will be executed at the listed bid/ask prices. This is one of the reasons why it is highly recommended that investors use a limit order when buying or selling ETFs, regardless of the size of the order.

A limit order sets a price maximum/minimum with which you are willing to buy or sell a quantity of units of the ETF. This protects you from periodic price swings that may occur during the trading day and allows the market makers time to fill your order if the size of the trade is larger than the posted units, which are the number of available units being shown on the exchange.

Prices can even move substantially between when an order is placed and when it is executed, particularly if there is breaking news in the market on a particular sector or security within the ETF's portfolio.

By using a limit order, you can specify the exact price at which your trade order can be filled. If the bid/ask prices or NAV per unit do not meet the limit order specified price, the order will not be filled. With a limit order, you do not have to worry about buying or selling the ETF at a price you were not expecting.

ETF Trading Tips

1. Always use a limit order

An ETF's NAV is tracked throughout the day by a market maker. The market maker's function is to ensure that the bid/ask prices for the ETF track closely to the NAV throughout the trading day so that buy and sell orders can be executed accurately regardless of trading volume. However, the market making system is automated and sometimes can experience interruptions where the market maker is not "in" the market to ensure efficient pricing. When this happens, the market maker's bid/ask prices disappear and the prevailing bid/ask prices at that time are those of other market participants that may not be closely tracking the current NAV. By using a limit order, you can specify the price for buying or selling units/shares and limit the length of time the order is valid before being cancelled.

2. Avoid trading in the first and last five minutes of the trading day

An ETF is a convenient way to buy a diversified basket or portfolio of securities. The price of the ETF is simply the weighted average price of each of the underlying securities. However, when the market opens, it may take a few minutes for some of these underlying securities to begin trading and have their value reflected in the price of the ETF. At the end of the day, the market maker that keeps an ETF's value in line with its NAV may be exiting the market as it is executing its own closing transactions.

3. Only execute ETF trades when the underlying market is open

This is particularly important when executing trades in an ETF that tracks a commodity or currency. Commodity and currency markets open and close at different times than North American equity markets which are open from 9:30 a.m. – 4:00 p.m. EST. Because ETFs are listed on an equity exchange, it will trade during these times, even though the underlying commodity or currency market could be closed.

In order to ensure that you are getting fair pricing relative to NAV, only buy and sell the ETF when the underlying market is open as that's when the market maker can ensure accurate pricing. Consult the ETF provider's website for the times that the underlying commodity or currency market is open. This also applies to holidays when a Canadian market might be open and the U.S. market might be closed.

DIRECTORY

ETF Providers and Related Professionals

ETF Providers

BMO Asset Management Inc.

100 King Street West, 43rd floor
Toronto, ON
M5X 1A1
Contact: Kevin Prins,
Managing Director, Head of Distribution for ETFs and Managed Accounts
Email: kevin.prins@bmo.com

BMO Exchange Traded Funds (ETFs) Established in June 2009, BMO Financial Group's ETF business is a leading ETF provider in Canada. Since its inception, BMO ETFs has grown to over 100 funds, and includes several industry firsts. The ETFs provide Canadian investors with broader choices and greater access to an innovative portfolio of investment products. BMO ETFs have over $117 billion in assets under management, as of July 31, 2024.

Website: bmo.com/etfs

BMO ETFs are managed and administered by BMO Asset Management Inc., an investment fund manager and portfolio manager and separate legal entity from the Bank of Montreal. Commissions, management fees and expenses all may be associated with investments in exchange traded funds. Please read the prospectus before investing. Exchange traded funds are not guaranteed, their values change frequently and past performance may not be repeated.

Desjardins Global Asset Management

1, complexe Desjardins
P.O. Box 7, succursale Desjardins
Montréal (Québec) H5B 1B2
Phone: 1-866-666-1280
Email: RI@desjardins.com

Established in 1998, **DGAM** is Desjardins Group's institutional asset manager. With over 100B$ assets under management, we are known for our ability to design custom solutions and build robust portfolios in a variety of asset classes, vehicles and investment styles. Our approach is based on rigorous and agile investment processes that take into account each investor's specific needs, adapt to market environments and incorporate responsible investment best practices.

Desjardins Group is the largest cooperative financial group in North America and the fifth largest in the world, with assets of $435.8 billion as at March 31, 2024. It has been named one of Canada's Best Employers by Forbes magazine and by Mediacorp. To meet the diverse needs of its members and clients, Desjardins offers a full range of products and services to individuals and businesses through its extensive distribution network, its online platforms, and its subsidiaries across Canada. Ranked among the world's strongest banks according to The Banker magazine, Desjardins has one of the highest capital ratios and one of the highest credit ratings in the industry.

Website: https://www.desjardins.com/entreprises/investissement-placements/gestion-internationale-actifs/index.jsp

Dynamic Funds

Dynamic Funds
40 Temperance Street, 16th Floor
Toronto, ON M5H 0B4

Dynamic Funds, a division of 1832 Asset Management L.P., is one of Canada's most recognized asset management firms. We offer a comprehensive range of actively managed wealth solutions, including mutual funds, ETFs, hedge funds, alternative strategies, and managed asset programs.

Website: dynamic.ca

Fidelity Investments Canada ULC

483 Bay Street, Suite 300
Toronto, ON M5G 2N7

For over 30 years now, Fidelity Investments Canada (FIC) has been providing Canadian investors with a full range of innovative, performance driven investment products.

Learn more at **fidelity.ca**

Franklin Templeton Canada

200 King St. West, Suite 1400
Toronto, ON
M5H 3T4
1-800-387-0830

Franklin Resources, Inc. [NYSE:BEN] is a global investment management organization with subsidiaries operating as Franklin Templeton and serving clients in over 155 countries. In Canada, the company's subsidiary is Franklin Templeton Investments Corp., which operates as Franklin Templeton Canada. Franklin Templeton's mission is to help clients achieve better outcomes through investment management expertise, wealth management and technology solutions. Through its specialist investment managers, the company offers boutique specialization on a global scale, bringing extensive capabilities in equity, fixed income, multi-asset solutions and alternatives.

Website: www.franklintempleton.ca

IA Clarington Investments Inc.

522 University Avenue, Suite 700
Toronto, ON
M5G 1Y7
Head Office: (toll free)1-888-860-9888
(local) 416-860-9880
Fax: 416-860-9884
Email: funds@iaclarington.com

One of Canada's leading investment management companies, iA Clarington brings clarity, integrity and commitment to a complicated global investment landscape. We offer a wide range of investments to individual investors through their advisors, including **Active ETF Series**.

Website: www.iaclarington.com

Invesco

120 Bloor Street East, Suite 700
Toronto, Ontario
M4W 1B7
Phone: 1-800-874-6275
Email: inquiries@invesco.ca

Invesco is a global independent investment management firm dedicated to delivering an investment experience that helps people get more out of life. Our distinctive investment teams deliver a comprehensive range of active, passive and alternative investment capabilities.

Website: www.invesco.ca

Mackenzie Investments

180 Queen Street West
Toronto, ON M5V 3K1
Email: ETFInquiries@mackenzieinvestments.com

Mackenzie Investments' ETFs are part of our commitment to bring the best offerings to advisors and help them meet investor needs.

mackenzieinvestments.com/ETFs

National Bank Investments

1155, Metcalfe street, 5th Floor
Montreal, QC H3B 4S9

National Bank Investments Inc. (NBI) is an investment fund management firm committed to manufacturing and distributing mutual funds, exchange-traded funds, investment solutions and services designed to help Canadian investors pursue their financial goals. National Bank Investments Inc. is a wholly owned subsidiary of National Bank of Canada.

As a key partner in the investment industry, our strength lies in designing investment solutions that provide strong risk-adjusted returns, for all investor profiles.
Guided by an open architecture structure, NBI strives to select the best investment talent and sub-advises to other firms the portfolio management of the funds built for our product shelf.

Website: nbinvestments.ca/etf

TD Asset Management Inc.

161 Bay Street
Toronto, ON
M5J 2T2

TD Asset Management Inc. (TDAM) is a leading asset manager in Canada with an expanding global presence. We offer an extensive suite of innovative solutions designed to provide better risk-adjusted returns and have a long track record of helping investors reach their investment goals. We have been in business for more than three decades, and over that time the investment landscape, investor needs, and our range of offerings have all evolved. What has remained consistent is our focus on quality, our risk management discipline, and our commitment to our clients. TDAM manages assets on behalf of about 3 million retail investors and offers a broadly diversified suite of investment solutions including mutual funds, exchange-traded funds, and professionally managed portfolios. Collectively, TDAM manages C$408 billion in assets as of Sept. 30, 2023.

Contact: Jonathan Needham,
Vice President and Director Lead of ETF Distribution
Email: jonathan.needham@td.com

Website: td.com/etfs

Data Provider

Fundata Canada Inc.

38 Lesmill Road
Toronto, ON
M3B 2T5
Phone: 416-445-5534
Email: sales@fundata.com
Contact: Jocelyn Courcelles

Expertise, industry intelligence and the most comprehensive investment fund database enable Fundata to offer valuable data driven analytical solutions customized for specific needs of clients.

Website: www.fundata.com

Resources

Canadian ETF Association

Phone: 416-494-1440 x239
Contact: Amanda Lopez
Senior Account Executive
Email: amanda@cetfa.ca

Website: www.cetfa.ca

TD Asset Management

Not All ETFs Are Created Equal

Choose from a variety of index, active and special focus exchange-traded funds (ETFs), specifically designed to help meet your investment goals.

See how our ETFs are built differently at

td.com/etfs

Commissions, management fees and expenses all may be associated with investments in exchange-traded funds (ETFs). Please read the prospectus before investing. ETFs are not guaranteed, their values change frequently and past performance may not be repeated. ETF units are bought and sold at market price on a stock exchange and brokerage commissions will reduce returns. TD ETFs are managed by TD Asset Management Inc., a wholly-owned subsidiary of The Toronto-Dominion Bank. ®The TD logo and other TD trademarks are the property of The Toronto-Dominion Bank or its subsidiaries.