





Please perform your own due diligence before making investment decisions. The contents of this newsletter do not constitute a recommendation to buy or sell securities.

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Market Radar							
Markets	TSX Composite	S&P 500					
P/E	15.97	26.98					
Yield (%)	2.95	1.76					
YTD Performance (%)	18.07	20.40					
Top Performers	ETF	Mutual Fund					
1-Month	3iQ CoinShares Ether ETF	CI Bitcoin Series I					
YTD	Horizons Big Data & Hardware ETF	Ninepoint Energy Series F					
3-Year	Horizons Big Data & Hardware ETF	3iQ Global Cryptoasset Class I					
Market data as of September 1st, 2021; top performers as of month-end.							
Note: We are no longer includi	Note: We are no longer including leveraged ETFs in top performers list						

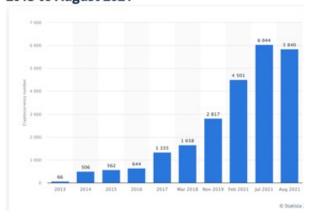
### Calibrating Crypto ETFs

By Barkha Rani

Whether it's your neighbours discussing stocks, Facebook communities, Whats App groups or TikTok; we keep hearing everyone rave about cryptos. Bitcoin, Ethereum and Dogecoin have skyrocketed in the past few days garnering investor attention after a sharp decline in May 2021.

While readers have likely heard of cryptocurrencies by now, we think an overview of what they are and how they work is helpful before considering ways to gain exposure through ETFs.

#### Number of cryptocurrencies worldwide from 2013 to August 2021



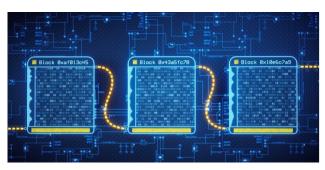
After the creation of Bitcoin, the original or first

cryptocurrency, the number of cryptocurrencies available for trade has ballooned to over 6000. While some of these 6000 have gained significant popularity and a "fan following", others have little to zero trading volume and no mainstream acceptance yet. The cryptocurrency universe is constantly expanding, with new digital currencies being released day after day, and any one of them can take off in popularity.

#### What is cryptocurrency, and how it works

Broadly defined, a cryptocurrency is created as a digital currency with transactions taking place in a decentralized system. Cryptocurrencies are developed as a "code" run by a collection of computers, also known as nodes or miners, which also stores the cryptocurrency database. Blockchain is a specific type of database wherein the blockchain stores data in blocks that are then chained together, hence the name. As a characteristic of a database, various types and forms of data can be stored within a blockchain, and the current most common use is as an account book or ledger for transactions. When one block is filled with data and new information/data comes in, a new block is created to fill in the data, which is then chained together in chronological order.





Source: <a href="https://www.hoyes.com/blog/can-blockchain-technology-save-the-credit-scoring-system/">https://www.hoyes.com/blog/can-blockchain-technology-save-the-credit-scoring-system/</a>

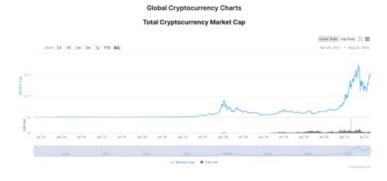
In a decentralized blockchain such as Bitcoin, no one person or institution controls the data. So collectively, all users of the blockchain retain and have access to the blockchain. Additionally, one of the characteristics of this, which applies to Bitcoin, is that the transactions can be transparently viewed by anyone and are permanently recorded.

To facilitate instant transactions/payments, Bitcoin uses peer-to-peer technology wherein certain independent individuals and institutions, known as miners, have the authoritative computing power to process transactions and are rewarded by the release of new bitcoins or transaction fees paid in Bitcoin. This is similar to brokers in traditional financial terms. Given the structure of peer-to-peer technology and programs associated with it, it is difficult to carry out an attack on popular cryptocurrencies such as Bitcoin. Cryptocurrencies are designed to be void of any government influence or control and are highly publicized, even though lately, with government interventions, some aspects of this

might change. While Bitcoin is known as the pioneer of cryptocurrencies, several new currencies are quickly gaining popularity, which affects coin ranking. Investors and analysts consider market capitalization as a primary criterion for ranking coins and their level of security.



The world's largest (by market cap) and most popular cryptocurrency is Bitcoin, followed by Ethereum, Binance Coin, Cardano, Tether and XRP. Dogecoin, a "meme" cryptocurrency, comes in at number 7 with a market cap of \$44.7 billion as of August 15th 2021. Bitcoin's market cap stood at \$883.4 billion, while Ether's was \$387.7 billion.



Rank	Name	Symbol	Market Cap	Price	Circulating Supply	Volume (24h)	% 1h	% 24h	% 7d
1	O Bitcoin	BTC	\$883,882,942,187.64	\$47,047.00	18,787,231 BTC	\$30,988,958,445.96	-0.37%	-0.11%	7.42%
2	Ethereum	ETH	\$387,728,432,649.60	\$3,310.50	117,120,660 ETH	\$22,166,205,051.30	0.30%	1.38%	9.85%
3	O Binance Coin	BNB	\$69,708,780,300.69	\$414.60	168,137,036 BNB *	\$1,826,134,191.71	0.36%	1.36%	21.20%
4	Cardano	ADA	\$69,656,279,630.58	\$2.17	32,112,195,710 ADA	\$5,964,077,684.08	-1.11%	-1.03%	51.92%
5	1 Tether	USDT	\$63,387,480,053.31	\$1.00	63,346,734,131 USDT *	\$77,556,076,132.82	0.00%	0.01%	0.04%
6	⊗ XRP	XRP	\$59,793,290,470.88	\$1.29	46,417,606,117 XRP *	\$10,899,164,864.23	-0.14%	0.61%	65.42%
7	O Dogecoin	DOGE	\$44,683,830,216.50	\$0.3414	130,868,317,236 DOGE	\$8,046,171,668.78	0.56%	16.49%	42.24%
8	O USD Coin	USDC	\$27,646,951,090.44	\$0.9998	27,651,125,346 USDC *	\$2,487,714,411.85	-0.01%	-0.01%	0.03%
9	9 Polkadot	DOT	\$22,861,284,470.56	\$23.17	986,505,059 DOT *	\$1,302,613,173.25	-0.11%	1.37%	17.78%
10	Uniswap	UNI	\$17,770,939,865.80	\$30.25	587,427,280 UNI *	\$420,500,472.93	0.54%	0.38%	13.21%

Source: https://coinmarketcap.com/historical/20210815/



As the graph above shows, 2021 so far has been a wild year for cryptocurrencies as they boomed significantly in the first quarter of 2021 as governments continued their expansionary economic stimulus but stumbled sharply after the Chinese crackdown on the coin miners and concerns over energy use. Over the past few weeks, however, things have started to heat up, with Bitcoin rising from nearly \$30,000 in July to over \$48,000 in the third week of August.

#### **Bitcoin**

From the previous information, readers might assume that there is no limit to how many bitcoins can be released or mined. However, there is a limit of 21 million bitcoin that can be mined in total. New bitcoins are released to the miners periodically, but at a declining rate, as it becomes more difficult and energy-consuming. As of August 2021, nearly 18.5 million bitcoins exist, with less than three million bitcoins left to be mined. As per CNBC, the U.S. is the second-largest mining destination on the planet, accounting for nearly 17% of all the world's bitcoin miners as of April 2021, a 151% increase from September 2020. On the other hand, before the Chinese mining ban, China accounted for 46% of the world's total hashrate (computing power of the bitcoin network), a sharp decline from 75.5% in September 2019.

FUTURE BITCOIN SUPP	LY
90% Supply	Dec 18, 2021
95% Supply	Apr 4, 2026
99% Supply	Mar 21, 2035
99.9% Supply	Mar 21, 2048
100% Supply	Feb 24, 2140

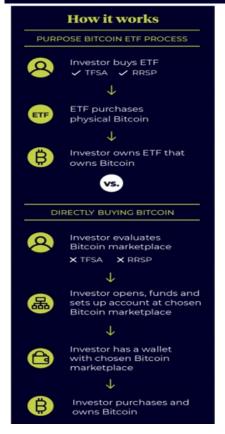
Source: bitbo.io

#### Purpose Bitcoin ETF (BTCC)

Purpose Bitcoin ETF (BTCC), managing over \$1.4 billion in assets, is the world's first physically settled Bitcoin ETF available to investors. Physically settled implies that by holding the fund, you hold actual Bitcoin rather than virtual papers such as Bitcoin futures. BTCC is offered in several versions such as BTCC, which is hedged in Canadian dollars, BTCC.B is in Canadian dollars-unhedged, and BTCC.U in U.S. dollars-unhedged. All three versions are

"true" ETFs wherein new units are created with demand, and then Bitcoin is purchased with the cash received. Theoretically, this should result in closer tracking of net asset value compared to having to buy existing units in the markets, such as in the case of closed-end funds. As of August 20th 2021, BTCC holds 22,046.4 bitcoins and allocates 0.00016135 bitcoin per one ETF share. The numbers change slightly for BTCC versions. Management has capped the management expense ratio (MER) at 1.50%, and if the MER falls below 1.5%, the savings are passed onto shareholders. Currently, the MER stands at 1.0%.

Diversification with low correlation to other assets								
CORRELATION	NS TO B	TCOIN**						
As At JUL 30, 20	021							
ASSET CLASS	ASSET CLASS 1 YEAR 3 YEAR 5 YEAR							
Canadian Equity	0.30	0.28	0.20					
US Equity	0.23	0.24	0.18					
Canadian 0.00 0.16 0.13 Fixed Income								
Gold	0.09	0.18	0.13					



Source: Purpose Invest



The most favourable advantage of holding Bitcoin through BTCC ETF is that the investment growth is tax-protected. Investors can hold BTCC in a Registered Retirement Savings Plan (RRSP) or Tax-Free Savings Plan (TFSA) account.

#### The Bitcoin Fund (QBTC)

The Bitcoin Fund (QBTC) is a closed-end investment fund managing over \$1 billion in assets and charges a relatively high MER of 1.95%. In contrast with BTCC, QBTC is a closed-ended fund and is less preferred by investors compared to conventional ETFs for getting exposure. This is due to liquidity and NAV discrepancies. QBTC can trade at a price that can be at a discount or premium to the fund's underlying net asset value (currently at a 6.9% discount). The NAV is affected by the supply and demand of investors and currency fluctuations. While the fund is eligible for RRSP and TFSA accounts offering tax shelter, the volatility around net asset value is not something all investors will be comfortable with. In addition, the high fees compared to other players in the market puts QBTC at a further disadvantage. It's important to note that in May 2021, the fund manager 3iQ announced a voluntary conversion option for the Bitcoin Fund (QBTC) fundholders to convert all or part of their units into units of 3iQ CoinShares Bitcoin ETF (BTCQ), which we favour more than OBTC.

#### CI Galaxy Bitcoin (BTCX)

CI Galaxy Bitcoin (BTCX) is a newer Bitcoin ETF charging the lowest MER of 0.4%. Launched in March 2021, the ETF now manages nearly \$338.8 million in assets. The fund offers exposure of 0.000152 bitcoin per ETF unit. While the fund is tax-sheltered, the ETF is still new with low assets, a wide bid-ask spread and high volatility. In comparison, BTCC has a much higher trading volume and assets under management. We would prefer to watch BTCX until it completes a year or reaches \$100 million in assets (whichever comes first) before stepping, especially considering how new the bitcoin ETF space is and the volatility of the underlying bitcoin asset itself.

Given the fees, asset base, volume, and spreads, our preferred ETF for Bitcoin exposure is BTCC. The table

below shows some trading data compared to the underlying Bitcoin asset.

CLOSED-END FUNDS		EXCHANGE-TRADED FUNDS	
GBTC Price*	\$39.58 USD	BTCC.U-TO Price	\$9.22 USD
GBTC Premium	-12.86 %	BTCC.U-TO Premium	0.78 %
OBTC Price *	\$16.00 USD	BTCX.U-T0 Price	\$9.34 USD
OBTC Premium	-2.80 %	BTCX.U-T0 Premium	0.47 %
QBTC.U-TO Price	\$50.31 USD	EBIT.U-TO Price	\$18.60 USD
QBTC.U-TO Premium	-6.66%	EBIT.U-TO Premium	0.64 %
		BTCQ.U-TO Price	\$8.14 USD
		BTCQ.U-TO Premium	0.01%
		BITC.U-TO Price	\$14.62 USD
		BITC.U-TO Premium	1.06%

Source: bitbo.io

#### Ethereum

While Bitcoin and Ethereum are both cryptocurrencies, they also have some stark differences. The main difference between Ethereum and Bitcoin is the fact that Ethereum is programmable. Programming is a necessary characteristic to realizing the full potential of blockchains. With full programmability, there are many types of 'smart contracts' or complex deals that can be facilitated. That feature broadens the scope of Ethereum, making it more than just a digital currency. It makes Ethereum a marketplace for financial services, games, and apps. With the usual caveats of this space being more emerging and higher risk, Purpose Ether ETF (ETHH) or CI Galaxy Ethereum ETF (ETHX) are likely two good options for Ethereum ETF exposure.

#### **ETHH**

Offered by Purpose Investments, Purpose Ether ETF (ETHH) is the world's first physically settled Ether ETF, managing nearly \$264.1 million in assets. The ETF holds nearly 63,350 Ethers, offering exposure of ~0.00350 ETH per ETF share. The MER is 1.0% and is capped at 1.5% by management. The ETF is tax-sheltered and, just like BTCC, comes in a CAD-hedged, unhedged, and USD versions.



Diversification with low correlation to other assets							
CORRELATION	NS TO ET	THER**					
As At JUL 30, 20	021						
ASSET CLASS 1 YEAR 2 YEAR 3 YEAR							
Canadian Equity	0.21	0.33	0.26				
US Equity	0.19	0.30	0.22				
Canadian Fixed Income	0.05	0.18	0.14				
Gold	0.02	0.17	0.13				

Source: Purpose Invest

#### CI Galaxy Ethereum ETF (ETHX)

Launched on the same date as ETHH, CI Galaxy Ethereum ETF (ETHX) has grown to manage over \$659 million in assets. The reason for faster growth than ETHH is the competitive management fee of 0.4%, the lowest amongst Ether ETF peers (which was even waived till June 2021). The MER is capped at 0.95% by management. Just as with ETHH, ETHX also holds Ether in Offline Cold storage adding a layer of security. Cold storage wallets are encrypted devices that store investors' Ethereum assets offline, protecting against possible threats from being connected to the internet. The ETF is tax-sheltered and offers exposure to 0.00462 Ethers per ETF share. Given that these crypto ETFs are still relatively new, the tracking error is unknown.

ETHE is a \$10.2 billion Ethereum trust, which tracks the price of the crypto, but just as QBTC it is a closed-ended fund and the discount to asset value currently is 5.8%. The fee is high at 2.5%. We prefer exposure through ETFs mentioned above.

We consider the cryptocurrency world to be in the early stages and expect a lot of volatility. We do not think every investor needs exposure and suggest limited exposure for portfolios that seek safety and capital preservation.

1. <a href="https://www.china-briefing.com/news/how-foreign-technology-investors-benefit-from-chinas-new-infrastructure-plan/">https://www.china-briefing.com/news/how-foreign-technology-investors-benefit-from-chinas-new-infrastructure-plan/</a>

2. <a href="https://www.cnbc.com/2021/07/17/bitcoin-miners-moving-to-us-carbon-footprint.html">https://www.cnbc.com/2021/07/17/bitcoin-miners-moving-to-us-carbon-footprint.html</a>

Disclosures: Authors, directors, partners and/or officers of 5i Research have financial or other interest in BTCC.B, QBTC, and ETHX.B.

## HDIV—High Yields with a Levered Twist

by Chris White

With bond yields near historic lows and interest rates virtually non-existent, investors are faced with the difficulty of trying to obtain yield. The prospect of investing money and earning a stable yield that can offset costs such as inflation or other costs can be challenging, and Hamilton Capital Partners has developed an Exchange-Traded Fund (ETF), which aims to offer a yield that has not been seen for decades. The fund, Hamilton Enhanced Multi-Sector Covered Call ETF (HDIV), is seeking to provide investors with an 8.5% annual distribution yield along with outperformance of the S&P/TSX 60 index. The distributions are monthly, and the Management Expense Ratio (MER) is 0.65%. The holdings of this ETF are seven covered call ETFs distributed across the major sectors of the S&P/TSX 60 index. As an added incentive, the ETF uses leverage to provide exposure to 1.25 times its underlying holdings. With high yield, increased leverage, and diversified sector exposure, this brand-new ETF is one to keep an eye on.

The fund holds covered call ETFs, so let's review the basics of a covered call and how that is incorporated into an ETF. A covered call strategy occurs when an investor holds the underlying asset in a "long" position and simultaneously sells a call option on that asset, therefore receiving the option premium. In a market that is flat, this option premium can be thought of as income on a stable asset, as the underlying asset has not increased or decreased, and the investor has received the option premium. In a decreasing market, the investor has lost capital gains on the underlying long position but has received the option premium to slightly offset this capital gains loss. In an increasing market, the investor foregoes some of the upside capital appreciation on the stock but has received the option premium to potentially offset some of this opportunity cost. Most of the holdings of HDIV write covered calls on only 25% to 33% of the portfolio securities, with one writing as much as 100% of the portfolio's securities. HDIV uses cash borrowing to lever-



age the funds up to 125% and aims to provide 1.25 times return on the underlying holdings.

#### What are the Underlying Fund Holdings?

Below are the seven sectors that HDIV is allocated to, and as we can see, it is an equal distribution.



Source: Hamilton ETFs

Below we will examine the seven underlying covered call ETF's that HDIV holds:

## Harvest Tech Achievers Growth & Income ETF (HTA)

The Harvest Tech Achievers Growth & Income ETF (HTA) offers an equal weighting towards 20 large-cap global technology companies and has a covered call strategy of up to 33% of the portfolio's securities. The fund has a MER of 0.85%, a yield of 4.99%, and the top holdings include AMD, Qualcomm, Applied Materials, Keysight Technologies, Adobe, Google, and more. The underlying securities have been selected for their history of consistent profitability, leading positions in the technological landscape, and offer dividends and have the potential to increase their dividends over time.

#### BMO Covered Call Canadian Banks ETF (ZWB)

The BMO Covered Call Canadian Banks ETF (ZWB) provides exposure to Canadian banks and has a covered

call strategy of up to 50% of the portfolio's securities. Top holdings of this ETF include the BMO Equal Weight Banks Index, BMO, CIBC, RBC, National Bank of Canada, TD Bank, and Scotiabank. The annualized yield is 5.85%, and the MER is 0.65%.

#### BMO Covered Call Utilities ETF (ZWU)

The BMO Covered Call Utilities ETF (ZWU) offers an equal weighting towards utilities, telecommunications, and pipeline companies. The covered call strategy writes up to 50% of the portfolio's securities and is written in proportion to the weight of each security in the portfolio. The annualized distribution yield is roughly 7.4%, and the MER is 0.65%. The top holdings include BMO Equal Weight Utilities Index ETF, BCE Inc., Enbridge, Telus Corp, Fortis Inc., Pembina Pipeline Corp, and others.

#### CI U.S. & Canada Lifeco Income ETF (FLI)

CI U.S. & Canada Lifeco Income ETF (FLI) offers exposure to the top ten largest U.S. and Canadian life insurance companies by market cap and primarily consists of North American companies. The covered call strategy writes up to a maximum of 25% of the portfolio's securities. The dividend yield is roughly 3.49%, and the call option premium yield is around 3.06%, for a total current yield of ~6.55%. These companies have the potential for high income generation and exhibit good capital appreciation and relatively lower volatility. The top holdings include Lincoln National, Prudential Financial, Canada Life, Metlife, Sunlife, and more. The MER is 0.75%.

#### CI Energy Giants Covered Call ETF (NXF)

CI Energy Giants Covered Call ETF (NXF) invests in an equal weight of energy securities, primarily the 15 largest energy companies by market cap in North America. The covered call strategy writes on a maximum of 25% of the portfolio's securities. The call option premium is about 6.66% plus a dividend yield of around 3.55%, for a total yield of 10.21%. The top holdings include Royal Dutch



Shell, Ecopetrol, Equinor, Eni Spa, BP PLC, and Chevron.

## Horizons Enhanced Income Gold Producers ETF (HEP)

The Horizons Enhanced Income Gold Producers ETF (HEP) offers an equal weighting of North American gold mining and exploration companies that are the largest constituents in their sector. The covered call strategy will write up to 100% of the portfolio's securities, and they are primarily Canadian securities with roughly 15% U.S. companies. The estimated annual yield is around 5.37%, and the MER is 0.65%. The gold sector has traditionally exhibited higher volatility than the broad market and with a low correlation.

#### Harvest Healthcare Leaders Income ETF (HHL)

This is an equal weighted ETF of 20 large healthcare companies by market cap that offer high dividend yields and capital appreciation. The covered call strategy writes up to 33% of the portfolio's securities. This ETF mostly consists of pharmaceutical companies, healthcare equipment and supply companies and biotechnology. The top holdings include Amgen, AstraZeneca, Eli Lilly and Company, Johnson & Johnson, Pfizer, etc. The current yield is around 8.17%, and the MER is 0.85%.

HDIV Holdings						
Holdings	Weight	Yield				
ZWB	14.3%	5.85%				
zwu	14.3%	7.40%				
HTA	14.3%	4.99%				
FLI	14.3%	6.55%				
NXF	14.3%	10.21%				
HEP	14.3%	5.37%				
HHL	14.2%	8.17%				
Total	100.0%	6.93%				
Total With Leverage	125.0%	8.67%				

#### Testing the 8.5% Target Yield

Funds that have a covered call strategy embedded into them often provide more frequent cash flow distributions (typically monthly) and a higher yield alongside more stable price action. The targeted yield of 8.5% offered by HDIV is quite substantial, and we believe the target is realistic based on both the leveraged nature of the fund and the higher yields offered by its covered call ETF constituents. Below we have tested how the fund might arrive at an 8.5% yield based on the distributions and weights of the constituent holdings.

The weighted average distribution yield of these seven ETFs without leverage would be close to 6.9% and adding in leverage of 125%, and we arrive at close to 8.7%, which is likely the basis for the fund's 8.5% target yield.

#### **Risks**

There are some risk considerations involved in an ETF that is not only lightly leveraged but also involves a lot of covered call strategies. While the appeal of a covered call strategy is to provide an investor with frequent cash flow, the downside is that in an extreme bull market, these funds will underperform in terms of capital appreciation.

The fund is what we consider "lightly leveraged", meaning it is not as volatile as a 2X or 3X leveraged ETF would be, but the added 25% leverage does have some implications for a long-term buy and hold position. Any leveraged fund typically has what is known as "volatility decay", which is a combination of a need by the fund manager to reset leverage each day in the fund, and downside volatility, which causes the value to erode in the fund.

Take the two models below as an example. The model on the left is without leverage and starts with a base of \$100. It earns 5% on the first day, then loses 2% on the second day, and then gains back 2% on the third day, for a total gain of 5%. The model on the right is with 125% leverage, and so it earns 6.25% on the first day, loses 2.5% the second day, and gains back 2.5% the third day, for presumably a total gain of 6.25%, but what we see is the effects of volatility decay. This is the visible result of the difficulty of gaining back money from a loss, as higher and higher gains are needed (a 50% loss requires a 100% gain to break even).

#### Who is Suitable for This Investment?

Investors seeking a high distribution yield while



#### Base Model - No Leverage

% Gain/(Loss)	Tota	al Capital	\$ Gai	n/(Loss)
Start	\$100.0		Cumulative Gain	
+5.00%	\$ 105.0		\$	5.0
-2.00%	\$ 102.9		\$	2.9
+2.00%	\$	105.0	\$	5.0

#### 125% Leverage Model

% Gain/(Loss) Tot		l Capital	\$ Gai	n/(Loss)	Volatility Decay	
Start	\$100.0		Cumulative Gain		% Above Base Model	
+6.25%	\$	106.3	\$	6.3	125.0%	
-2.50%	\$	103.6	\$	3.6	123.9%	
+2.50%	\$	106.2	\$	6.2	124.7%	

preserving their capital base would benefit from this ETF. The fund is well-diversified across seven broad sectors and utilizes a covered call strategy to target a high 8.5% yield. The fund incorporates a leverage component that, at times, can boost the performance of the underlying securities. However, this leverage can also act against the investor in the event of a volatile or bear market. It is still a relatively new fund, and we would watch how closely the monthly distributions track to 8.5% and if there are any tracking errors associated with a 125% leverage factor. However, the HDIV ETF is utilizing strategic methods to present investors with a higher yield in a low-yield environment.

Disclosures: Authors, directors, partners and/or officers of 5i Research have financial or other interest in ZWB, and ZWU.

# Studying the Design of Distributions: Intro and Capital Gains Distribution

#### by Barkha Rani

With this new series, we will be exploring what Exchange-Traded Funds (ETF) distributions are comprised of, how the different categories are calculated and applied against an investment, their tax treatment, and what it might mean for your portfolio.

First things first, not ALL ETF distributions are paid in cash. ETFs commonly make monthly or quarterly distributions to ETF holders in the form of cash, while capital gains are often paid as reinvested distributions—no cash is paid out to investors but rather is reinvested in the fund.

#### Distributions can be

- Equity dividends (which are eligible for dividend tax credit)
- Capital gains (50% of capital gains are subject to tax and must be added to taxable income)
- Return of Capital (ROC) (not taxable, but reduces the adjusted cost base (ACB) of shares which might result in higher capital gains)
- Foreign income (net of any foreign withheld taxes)
- Interest (for bond ETFs where interest is treated as income)
- Reinvested income or phantom distribution (taxable, not received in cash and increases the ACB of shares)

#### Adjusted Cost Base (ACB)

ACB is often thought of as the "book value" of an investment. This figure is used for calculating capital gains or losses for tax purposes when the investment is sold. Major brokerages show book value or cost value on their trading platform, client statements and investment slips. As an example of ACB calculation, let's suppose an investor transacts in the following manner:



Jan 1	Purchase 10 units of an ETF @ \$10 per unit	\$100			
Janı	Fulchase to units of all ETF @ \$10 per unit	\$100			
Jul 1	Purchases another 10 units of the same ETF @ \$15 per unit	\$150			
	Investor now owns 20 units of an ETF with a total investment of:	\$250			
	ACB per ETF unit: $\frac{\text{Total Investment } $250$}{\text{No. of units. } 20} = $12.50 \text{ p}$	er unit			
Nov 1	Sells 20 units @ \$20 per unit and with an ACB of \$12.50 per unit				
	Capital Gain per unit = \$20 - \$12.50 = \$7.50 per unit				
	Total Investment Capital Gain = \$7.50 x 20 units = \$150				

#### Capital Gains Distribution From an ETF

Even without selling a single ETF share and reinvesting any distribution back in the ETF, investors might still have to pay taxes on a capital gains distribution made by the funds. When a fund sells securities in the fund that have appreciated or result in a capital gain, the ETF distributes those gains to shareholders. Shareholders are then required to pay taxes on the capital gains distribution made by the fund, in addition to taxes paid on any interest or dividends. (Capital gains would be net of any capital losses an investor has, if applicable.)

Capital gains distributions are typically paid out once a year (often in the months of November or December.) The fund prospectus for an ETF will disclose information on distributions. The ETF annual or semi-annual financial statements and prospectus will provide information on historic fund distributions, the breakdown of fund distributions, and sometimes forward-looking statements or estimates. Look below for a sample:

	June 30,			December 31,
	2021	2020	2019	2018
Distributions				
From income (excluding dividends)	_	(0.01)	_	_
From dividends	(0.36)	(0.64)	(0.63)	(0.62)
From capital gains	_	_	_	(0.50)
Return of capital	(0.03)	(0.14)	(0.10)	
Total distributions <sup>(c)(d)</sup>	(0.39)	(0.79)	(0.73)	(1.12)

Source: iShares XIU 2021 Interim Management Report of Fund Performance

NOTE: This only applies to non-registered accounts. For registered accounts, distributions can still happen, but they are tax sheltered until the funds are withdrawn. No T3 is issued.

## What can trigger a capital gains distribution to an ETF

A fund can realize capital gains for

- Portfolio rebalancing/changes: Changes in strategy, realizing gains from price appreciation, and periodic rebalancing can result in capital gains for unitholders even if they do not sell any units
- Equity changes: Mergers and acquisitions of companies, or privatization can also often result in capital gains

The capital gains distribution can either be paid out in cash or reinvested in additional units of ETF in a consolidated way where the fund's total outstanding units do not change. Additional units reduce the ACB because NAV is reduced by the amount of the distribution per unit. The reinvestment, then, increases the ACB (assuming the reinvestment will likely be done at a higher price), which will decrease any realized capital gain (or increase realized capital loss if investment incurs further losses) to an investor when they eventually sell the ETF units. In non-registered accounts, taxes apply on capital gains distribution, whether they are paid in cash or as reinvested distributions. For ETFs held in non-registered accounts, investors will receive T3 slips for distributions from a Canadian ETF or a T5 slip from Canadian brokerage for distributions from a foreign ETF received during that tax year. For income received on investments held in registered plans, income is not immediately taxable and therefore a T3 tax slip is not issued.

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