



QUARTELY COMMENTARY 2018 Q4



CANNIBIS CONTINUES TO EVOLVE

REGULATORY DEVELOPMENTS

- Canada legalized the recreational use of cannabis nationwide for adults, officially bringing 95 years of recreational cannabis prohibition to an end.
- In the United States, marijuana legalization was on the ballot in four states during midterm elections. Michigan became the first Midwestern state to legalize marijuana for recreational use by adults. Although an initiative in North Dakota failed, Utah and Missouri legalized marijuana for medical use. As a result, recreational marijuana is legal in 10 states and Washington DC, and medical marijuana is legal in 33 states.¹
- Not to be outdone by their neighbors to the north, Mexico's incoming government submitted a bill to create a medical marijuana industry and to allow its recreational use.
- At the federal level, President Trump signed the Agricultural Improvement Act of 2018 (the 2018 Farm Bill). While the Farm Bill does not legalize marijuana at the federal level, it does legalize hemp cultivation, which will be a catalyst for growth in the CBD industry.

1. States' legalization of marijuana carry many restrictions. Marijuana remains a Schedule 1 drug, illegal under federal law. The ETFMG Alternative Harvest ETF (MJ) does not invest in any U.S. or foreign security whose business activities are illegal under any applicable federal or state law.

BUSINESS DEVELOPMENTS

- Altria Group, Inc. (NYSE: MO) announced that it agreed to acquire 45% of Cronos Group (NASDAQ: CRON) for \$1.8 billion. Aside from providing significant growth opportunities for Altria, it will help Cronos Group to expand their global infrastructure and distribution footprint while benefitting from Altria's experience in regulatory, government affairs, compliance, product development and brand management.
- Shortly after the Sandoz AG announcement, Tilray and AB InBev entered into a \$100 million joint venture to study cannabis-based beverages. The joint venture, in which both companies will invest \$50 million each and is limited in scope to Canada, will study non-alcoholic beverages containing THC as well as CBD.
- Aurora Cannabis Inc. (NYSE: ACB) signed a deal to acquire Mexican company Farmacias Magistrales. Farmacias became the first Mexican federally licensed importer of raw materials containing THC. The acquisition is expected to provide Aurora with access to approximately 80,000 retail points and 500 pharmacies and hospitals across Mexico.
- Novartis AG's (NYSE: NVS) pharmaceutical group Sandoz AG and Tilray (NYSE: TLRY) announced that they were expanding their business relationship in Canada to a global partnership. Under their original agreement, the companies began shipping non-combustible medical products with the Tilray and Sandoz/Novartis brands to customers in Canada. The new global arrangement will now allow Tilray to use Sandoz AG's supply chain, sales force and global distribution network to distribute Tilray medical cannabis products.



KEY MONTHLY DEVELOPMENTS

October

- **Canada legalizes recreational marijuana consumption.** The Cannabis Act, which was passed earlier this year in June, came into effect in October 17, 2018. The legislation legalizes marijuana consumption nationally for adults 18 and over, with limitations on personal cultivation, promotion, and packaging. Canada became the first developed nation to legalize recreational marijuana, but the second nation overall (Uruguay legalized it in 2013).

November

- **Mid-term elections:** Michigan became the 10th state to legalize recreational use of marijuana via Proposition 1 after voters approved it in November, albeit with limitations. For example, marijuana must be consumed in private only by residents 21 and older, but it will not be available for commercial sales until a framework for rules and regulations has been established. Voters in Utah and Missouri approved marijuana consumption for medicinal use. Specific qualifying disorders are required for Utah residents, but doctors in Missouri can prescribe it for any condition they see fit. North Dakota voters rejected a proposition to legalize recreational marijuana, and unlike other state's proposals, the North Dakota initiative would have no limit on cultivation and possession. Medical marijuana consumption was approved in North Dakota in 2016. There are now 33 states + DC that have legalized cannabis use in some form, with 10 of those states + DC allowing recreational consumption.
- **AG Sessions is gone, but the "Sessions Memo" remains:** President Trump fired Attorney General Jeff Sessions, but Matt Whitaker (Sessions' chief of staff) will serve as interim AG. In January 2018, Sessions rescinded the "Cole Memo,"



which since 2013, has governed federal prosecution of cannabis-related offenses by stating that the Justice Department would not enforce federal prohibition in states with “legalized marijuana in some form.” Sessions’ memo, which essentially rescinds the Cole memo, immediately impacted cannabis stock prices. Sessions was an outspoken critic of cannabis consumption of any type, and it is unclear what Whitaker’s position will be (or the new AG).

December

- **Big Tobacco moves in:** On December 7, Tobacco giant Altria (MO) announced that it is investing \$1.8 billion into Canadian cannabis company Cronos Group (CRON) that will give it a 45% stake with an option to increase its position to 55% over the next five years. Altria, the maker of Marlboro brand of cigarettes, along with other tobacco companies, have seen smoking rates continue to decline in Canada and the United States, pushing those companies to consider alternative sources of revenue.
- **2018 Farm Bill passed:** US legislation that, among other provisions, removes hemp (low-THC cannabis; where THC is the psychoactive cannabinoid that creates the euphoric stimulation) from Schedule I of the Controlled Substances Act. The bill was passed the Senate on Dec 11, 2018, the House on December 12, and signed into law by the President on December 20. The bill was considered by many to have strong bi-partisan support, as exhibited by the vote tallies from both Republicans and Democrats. The bill allows for hemp to be cultivated broadly by US farmers and permits the transporting of hemp-derived products across state lines. The plan is to make hemp like any other



agricultural commodity, except that there will be more restrictions, such as permitting and shared state-federal regulatory oversight. Further, the farm bill does not legalize cannabidiol generally (CBD, the other major cannabinoid contained in the cannabis plant), and preserves the FDA’s authority to regulate all food, supplements, cosmetics, and drugs containing CBD. Indeed, the FDA issued a statement immediately after the President signed the bill into law, stating that products containing CBD are not legal by default and require FDA approval, including supplements.

- **New York may legalize recreational cannabis quickly:** NY governor Andrew Cuomo formally announced that legalizing recreational cannabis is a priority, likely to be done by legislation within his first 100 days of his new term in office. The likelihood appears to be high now that Democrats control both houses of NYS legislature. New Jersey and New York appear to be racing to be “first” to pass legislation for recreational marijuana, with New Jersey legislators expected to vote on new laws in early 2019.
- **Medical cannabis approved in southeast Asia:** On December 26, the parliament of Thailand approved legislation to legalize medical marijuana, making it the first country to do so in southeast Asia. Nevertheless, the approval comes with strict controls. For example, all marijuana must be grown indoors, and any private company involved in cultivation and distribution would have to be $\frac{2}{3}$ owned by Thai nationals. Even then, those companies must work under the control of licensees, which are limited to government research institutions and universities.

FUND PERFORMANCE

MJ returned -36.34% for the quarter ended December 31, 2018, as the cannabis industry experienced a significant correction following a strong Q3.

Looking at sector performance, Health Care, at a 74.8% average weight, was the most significant detractor from MJ's return at -43.6% for Q4, followed by Consumer Staples (-43.6%) and Materials (-25.9%).

| Sector Contributors | Avg. Weight (%) | Total Return (%) | Sector Contribution (%) |
|---------------------|-----------------|------------------|-------------------------|
| Financials | 0.41 | -33.95 | -0.23 |
| Industrials | 1.27 | -40.67 | -0.45 |
| Materials | 4.03 | -25.88 | -0.94 |
| Consumer Staples | 15.57 | -18.86 | -2.98 |
| Health Care | 74.84 | -43.59 | -34.39 |
| Others | 2.00 | -33.18 | -0.56 |

At the security level, there were no shining stars in the portfolio. The least negative contributors to performance were led by non-pure play companies Japan Tobacco (-4.9%), Miguel y Costas (-23.5%), and Huabao International Holdings (-18.3%). Companies detracting most from fund performance included Tilray (TLRY, -57.2%), Aurora Cannabis (ACB, -48.9%), and Canopy Growth (WEED, -45.1%).

| Top 10 Postive Contributors | Avg. Weight (%) | Total Return (%) | Contribution to Return (%) |
|------------------------------|-----------------|------------------|----------------------------|
| Japan Tobacco Inc | 1.58 | -4.87 | -0.07 |
| Miquel Y Costas | 0.35 | -23.47 | -0.10 |
| Huabao International Holding | 0.86 | -18.30 | -0.14 |
| Imperial Brands Plc | 1.44 | -9.70 | -0.15 |
| Arena Pharmaceuticals Inc | 1.72 | -15.58 | -0.15 |
| Scandinavian Tobacco Group A | 0.93 | -20.83 | -0.16 |
| 22nd Century Group Inc | 1.66 | -10.43 | -0.17 |
| Cann Group Ltd | 0.92 | -26.19 | -0.21 |
| Canopy Rivers Inc | 0.41 | -33.95 | -0.23 |
| Altria Group Inc | 1.49 | -16.76 | -0.25 |

| Bottom 10 Negative Contributors | Avg. Weight (%) | Total Return (%) | Contribution to Return (%) |
|--|------------------------|-------------------------|-----------------------------------|
| Tilray Inc - Class 2 Common | 8.55 | -57.24 | -5.98 |
| Aurora Cannabis Inc | 8.13 | -48.92 | -4.49 |
| Canopy Growth Corp | 8.25 | -45.10 | -3.92 |
| Green Organic Dutchman Holdings | 3.52 | -65.79 | -2.89 |
| Canntrust Holdings Inc | 4.17 | -50.46 | -2.33 |
| Hexo Corp | 3.98 | -49.87 | -2.15 |
| Gw Pharmaceuticals - ADR | 4.68 | -41.77 | -1.93 |
| Aphria Inc | 1.49 | -54.12 | -1.85 |
| Emerald Health Therapeutics | 2.93 | -46.87 | -1.35 |
| Organigram Holdings Inc | 3.57 | -35.37 | -1.17 |

Looking at fundamental factor performance, factors contributing positively were the portfolio's exposures to the Healthcare sector and Earnings Variability. Other top contributors are as follows:

| Top 6 Factor Contributors | Active Exp. | Factor Rtn. | Factor Cont. |
|----------------------------------|--------------------|--------------------|---------------------|
| Industry: CA Staples | 0.08 | 11.1 | 0.94 |
| Style: CA Leverage | -0.66 | -0.88 | 0.45 |
| Style: US Value | -0.37 | -1.98 | 0.45 |
| Industry: US ConsmrP | 0.09 | 4.79 | 0.29 |
| Style: CA Momentum | 1.52 | -0.09 | 0.26 |
| Style: CA Volatility | 0.06 | -1.33 | 0.13 |

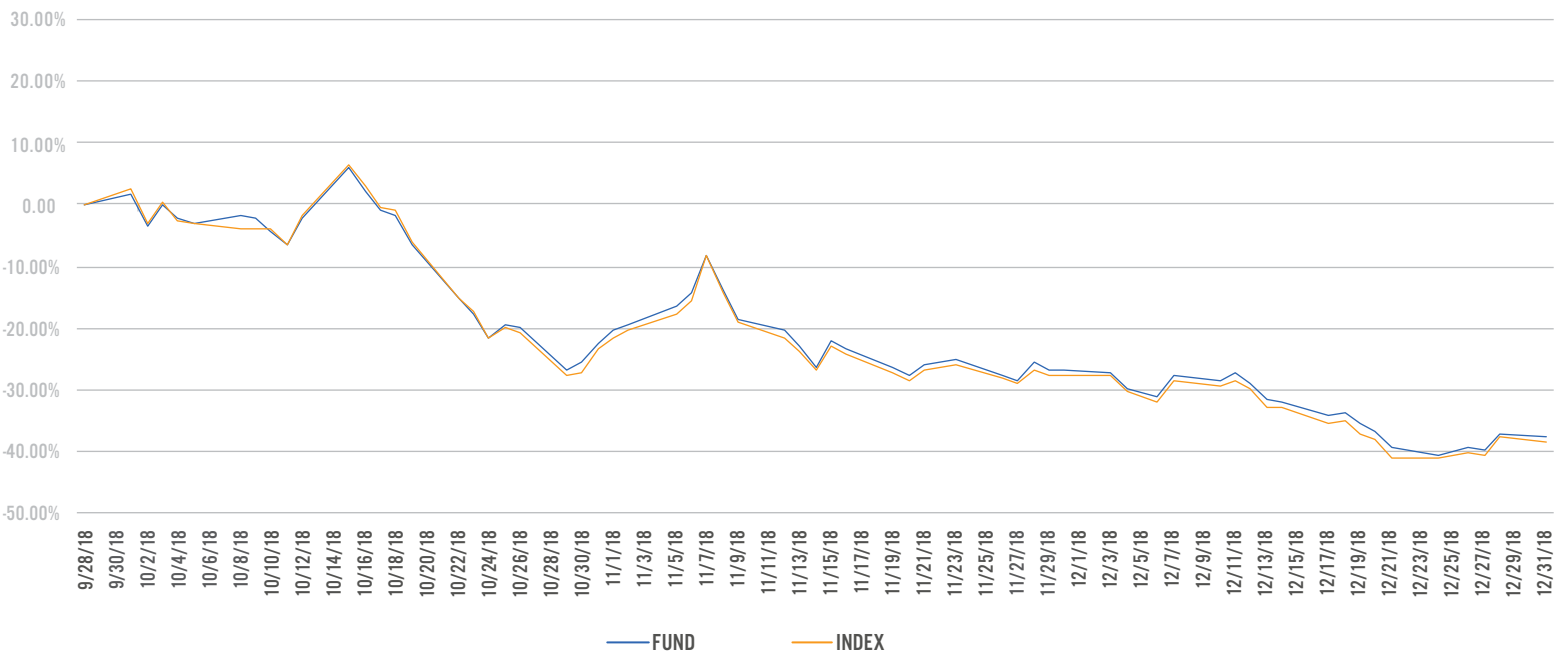
| Bottom 6 Factor Contributors | Active Exp. | Factor Rtn. | Factor Cont. |
|-------------------------------------|--------------------|--------------------|---------------------|
| Style: CA TradeAct | 1.71 | -3.1 | -5.32 |
| NorthAm: CA Market | 0.63 | -7.6 | -4.06 |
| Style: CA EarnVarib | 1.39 | -3.68 | -3.71 |
| Style: CA Size | -1.43 | 2.36 | -3.13 |
| NorthAm: US Market | 0.25 | -14.38 | -3.07 |
| Currency: CAD | 0.54 | -5.18 | -2.72 |

Breaking out the Style factor into its subcomponents, once again we see Size as the largest detractor from performance, followed by Trade Activity and Dividend Yield. On the positive size, performance was helped by Volatility, Value and Leverage.



| Style Return | Contribution |
|-------------------|--------------|
| Earnings Variable | 3.51 |
| Momentum | -0.36 |
| Size | -1.42 |
| Leverage | 0.73 |
| Dividend Yield | -0.59 |
| Trade Activity | 0.86 |
| Profitability | -0.40 |
| Growth | 0.72 |
| Liquidity | 0.00 |
| Volatility | -0.02 |
| Value | 0.99 |

TOTAL RETURN: Q4 2018



PERFORMANCE²

| | CUMULATIVE | | | | ANNUALIZED | | | | |
|---------------------|------------|----------|---------|--------------|------------|---------|---------|----------|--------------|
| | 1 month | 3 months | YTD | Since Incep. | 1 year | 3 years | 5 years | 10 years | Since Incep. |
| MARKET PRICE | -13.68% | -36.72% | -21.90% | 22.09% | -21.90% | 7.60% | | | 6.69% |
| NAV | -13.62% | -36.60% | -20.14% | 25.10% | -20.14% | 9.88% | | | 7.54% |

EXPENSE RATIO: 0.75%

Performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance of the Funds may be lower or higher than the performance quoted. All performance is historical and includes reinvestment of dividends and capital gains. Performance data current to the most recent month end may be obtained by calling 1-844-ETF-MGRS (1-844-383-6477). Performance is annualized for periods greater than 1 year.

2. On December 26, 2017, the Fund's investment objective and principal investment strategy were substantially revised; therefore, the performance and average annual total returns shown for periods prior to December 26, 2017 is likely to have differed had the Fund's current investment strategy been in effect during those periods. The Fund's prior investment objective sought to provide investment results that corresponded to the performance of the Solactive Latin America Real Estate Index, which tracked equities with primary listings in the Latin America region that derived most of their income from real estate and real estate services.

Carefully consider the Fund's investment objectives, risk factors, charges and expenses before investing. This and additional information can be found in the Fund's statutory and summary prospectus, which may be obtained by calling 1-844-ETF-MGRS (1-844-383-6477), or by visiting www.etfmj.com. Read the prospectus carefully before investing.

Investing involves risk, including the possible loss of principal. Shares of any ETF are bought and sold at market price (not NAV), may trade at a discount or premium to NAV and are not individually redeemed from the Fund. Brokerage commissions will reduce returns. Narrowly focused investments typically exhibit higher volatility. The possession and use of marijuana, even for medical purposes, is illegal under federal and certain states' laws, which may negatively impact the value of the Fund's investments. Use of marijuana is regulated by both the federal government and state governments, and state and federal laws regarding marijuana often conflict. Even in those states in which the use of marijuana has been legalized, its possession and use remains a violation of federal law. Federal law criminalizing the use of marijuana pre-empts state laws that legalizes its use for medicinal and recreational purposes. Cannabis companies and pharmaceutical companies may never be able to legally produce and sell products in the United States or other national or local jurisdictions.

The Fund's investments will be concentrated in an industry or group of industries to the extent that the Index is so concentrated. In such event, the value of the Fund's shares may rise and fall more than the value of shares of a fund that invests in securities of companies in a broader range of industries. The consumer staples sector may be affected by the permissibility of using various product components and production methods, marketing campaigns and other factors affecting consumer demand. Tobacco companies, in particular, may be adversely affected by new laws, regulations and litigation. The consumer staples sector may also be adversely affected by changes or trends in commodity prices, which may be influenced or characterized by unpredictable factors.

ETF shares are not individually redeemable and owners of the shares may acquire those shares from the Fund and tender those shares for redemption to the Fund in Creation Units only, typically consisting of aggregations of 50,000 shares.

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