

Monthly Medical Cannabis Market Report

December 2022

HANetf & Purpose Investments

The Medical Cannabis and Wellness UCITS ETF

CBDX

80bps

IE00BG5J1M21

Product Inception Date: 09/01/2020

For Professional Clients Only. Capital at risk.

All data as of 30/11/2022

This report was written by, and is the opinion of, the CBDX index providers Purpose Investments.

Key Takeaways

Ireland becomes the latest European country to introduce a regulatory draft for the personal consumption of cannabis for recreational use. The bill is focused on decriminalization to stop persecution of cannabis users. It presents an early step to start the conversation around cannabis reform but displays the domino effect in play in Europe as the cannabis chips continue to fall.

The midterm elections of 2022 presented five state ballots for adult use cannabis legalization measures. Of these only two have passed, while three ballots of smaller and predominantly republican states have failed by slim margins. With Maryland and Missouri being the newest states to pass reform, there are now 21 US states that have legalized cannabis for adult use. With each election cycle, the total addressable market for cannabis products continues to grow in the US.

In early December, Joe Biden signed marijuana specific reform legislation into law with the passing of the bipartisan Medical Marijuana and Cannabidiol Research Expansion Act. The bill will make it easier for researchers to study the plant. More importantly it will help create the body of work required to help steer Biden's call for a rescheduling review of cannabis.

Fund constituent Clever Leaves has been granted EU-GMP certification for the manufacture of cannabis dry flower, opening up the European industry into the company's sales channels for delivering active pharmaceutical ingredients and for finished products.

Fund constituent Charlotte's Web has received \$56.8M in investment funding from a subsidiary of British American Tobacco (BAT). This follows the recent investment into Germany's Sanity Group GmbH and Canada's Organigram from the tobacco giant. Strategic investments remain one of the most affordable avenues of financing for cannabis companies, however the much-anticipated SAFE Banking Act is expected to change these access issues in the near future.

Sources available upon request. **Please note that all performance figures are showing net data.** Past performance is not indicative of future performance and when you invest in ETFs, your capital is at risk.

Macro Outlook

After President Biden's call to reschedule cannabis last month, things have shifted into the next gear with many incremental good news stories surrounding the sector both in the US and in Europe. Starting off with the midterms, Maryland and Missouri became the latest states in the Union to legalize cannabis for adult use with a combined population in excess of 12M. There are now twenty-one US states which have legalized access to cannabis for adult use. Additionally, in the midterm elections the Democrats also managed to hold on to their control of the Senate which was widely anticipated to turn over control to the Republicans. This makes the path to cannabis reform slightly easier in the coming two years. Following the midterms, in early December, Joe Biden also signed into law the Medical Marijuana and Cannabidiol Research Expansion Act. The law will provide easier cannabis access to researchers looking to study the plant. Previously only seven facilities in all of the US had licenses to grow their own cannabis for research use. The law will help create a body of work which will be a key consideration into the rescheduling review which is currently being conducted by the Department of Health and of Justice at the request of the President. After a stalemate for almost two years since Chuck Schumer's promise to focus on cannabis reform, there is finally movement. It is also expected that the SAFE Banking Act is to be voted upon in the lame duck session in December. The SAFE Banking Act will provide better access to financial services for cannabis operators and is expected to include a framework for social equity provisions such as the HOPE Act as well.

Over in Europe, the dominoes are also starting to cascade with many national governments debating and discussing the potential impacts and advantages of decriminalizing cannabis for adult use. Drafts of adult-use bills are expected to be tabled in coming months in Czechia, Switzerland, Poland as well as Ireland. In addition, operators in Europe are hitting their stride as they find access to GMP certifications, continue to get import licenses, and start listing on European stock exchanges. The domino effect in Europe is very similar to that experienced in the United States. Over the past three election cycles, just under ten states have passed cannabis reform for adult use. We expect this to be a secular trend with Europe trailing the United States by about 3 years in terms of growth cycles.

The Medical Cannabis and Wellness UCITS ETF (CBDX) performed just over 3% for the month and is now up 10% in the fourth quarter.¹ With positive news catalysts happening at both micro and macro levels, we expect the industry to continue in its growth mode despite the macro headwinds that persist on a global basis. At the end of November, there were two names added to the fund through its quarterly rebalance. First is a previously dropped name of Charlotte's Web which recently received a \$56.8M investment from a subsidiary of British American Tobacco. The second is BYND Cannasoft which is a Nasdaq listed company based out of Israel which has business lines providing software to the global cannabis industry as well as a medical cannabis unit in Israel.

The near future promises to hold further incremental reform for cannabis in both the United States and in Europe. However after a long lag time of 18 months where no positive incremental news was part of the cannabis story, the industry is finally shifting gears into action mode as the domino effect starts impacting Europe and the United States.

All performances figures are showing net data. Past performance is not indicative of future performance and when you invest in ETFs your capital is at risk.

¹ Bloomberg. Data as of 30.11.2022.

Medical Cannabis Performance

As of 30.11.2022

| | 1M | 3M | 6M | YTD | 12M | 2Y | 3Y | SI |
|---|-------|--------|---------|---------|---------|---------|---------|---------|
| The Medical Cannabis and Wellness UCITS ETF (Acc) | 3.11% | -7.73% | -24.43% | -48.81% | -45.27% | -47.85% | NA | -32.48% |
| <i>Medical Cannabis and Wellness Equity Index (NTR)</i> | 2.94% | -8.09% | -24.70% | -48.99% | -45.43% | -47.72% | -41.77% | -32.49% |

Please note that all performance figures are showing net data. Source: Bloomberg / HANetf. Data as of 30.11.2022
Performance before inception is based on back tested data. Back testing is the process of evaluating an investment strategy by applying it to historical data to simulate what the performance of such strategy would have been. Back tested data does not represent actual performance and should not be interpreted as an indication of actual or future performance. Past performance for the index is in USD. Past performance is not an indicator for future results and should not be the sole factor of consideration when selecting a product. Investors should read the prospectus of the Issuer ("Prospectus") before investing and should refer to the section of the Prospectus entitled 'Risk Factors' for further details of risks associated with an investment in this product. When you invest in ETFs and ETCs your capital is at risk.

Product Details

The Medical Cannabis and Wellness UCITS ETF, is a UCITS compliant Medical Cannabis ETF domiciled in Ireland.

The fund tracks a rules-based Medical Cannabis and Wellness Equity Index from Solactive, consisting of publicly listed companies conducting legal business activities across nine thematic sub-sectors in the medical cannabis, hemp and CBD industries.

The fund seeks to provide targeted exposure to the rapidly expanding legal medical cannabis industry that is set for further growth as more countries legalise cannabis for medical use.

Please remember that the value of your investment may go down as well as up and past performance is no indication of future performance.

Visit the [CBDX Fund Page](#) for more information.

| Exchange | BBG Code | RIC | ISIN | Valoren | SEDOL | Currency | TER |
|-----------------------|----------|---------|--------------|----------|---------|----------|-------|
| London Stock Exchange | CBDX LN | CBDXL.L | IE00BG5J1M21 | - | BGSXSL9 | USD | 0.80% |
| London Stock Exchange | CBDX LN | CBDP.L | IE00BG5J1M21 | - | BGSXQX7 | GBP | 0.80% |
| Deutsche Boerse Xetra | CBSX GY | CBSX.DE | IE00BG5J1M21 | - | BJBL4D5 | EUR | 0.80% |
| SIX Swiss Exchange | CBDX SW | CBDX.S | IE00BG5J1M21 | 51899559 | BMYC3S4 | CHF | 0.80% |



Nawan Butt

Portfolio Manager, Purpose Investments

Nawan has spent 5 years with Purpose developing a deep understanding of client needs with the product team before applying his skills sets in portfolio management starting in 2018. Nawan combines in depth fundamental research with quantitative overlays in contribution to the security selection processes for the firm. Working closely with the CIO, Nawan is also responsible for the implementation of asset allocation across multiple mandates. Nawan earned his MSc in Finance from Simon Fraser University and is a CFA charterholder.

Important Information

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The Issuers

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 - ii. the carbon securities ETCs under the terms in the base prospectus approved by the UK Financial Conduct Authority ("FCA") and the relevant final terms of the carbon securities (together, "FCA Carbon ETC Prospectus"); and
 - iii. the carbon securities ETCs under the terms in the base prospectus approved by the Central Bank of Ireland ("CBI") and the final terms of the carbon securities (together, "CBI Carbon ETC Prospectus").

Investors should read the latest versions of the relevant ETC prospectus before investing and should refer to the section of the relevant ETC prospectus entitled 'Risk Factors' for further details of risks associated with an investment in the ETCs. Any decision to invest should be based on the information contained in the relevant ETC prospectus.

3. ETC Issuance GmbH, a limited liability company incorporated under the laws of the Federal Republic of Germany, issuing under the terms in the Base Prospectus approved by the Bundesanstalt für Finanzdienstleistungsaufsicht ("BaFin") and the final terms ("Cryptocurrency Prospectus") is the issuer of the ETC Group ETCs. Investors should read the latest version of the Cryptocurrency Prospectus before investing and should refer to the section of the Cryptocurrency Prospectus entitled 'Risk Factors' for further details of risks associated with an investment in the ETCs contained in the Cryptocurrency Prospectus. Any decision to invest should be based on the information contained in the Cryptocurrency Prospectus.

The ETF Prospectus, Metals ETC Prospectus, FCA Carbon ETC Prospectus, CBI Carbon ETC Prospectus and Cryptocurrency Prospectus can all be downloaded from www.hanetf.com.

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