DTCC

ETF Portfolio Data

OVERVIEW

DTCC's ETF Portfolio Data consolidates portfolio composition files from over 90+ ETF issuers covering approximately 3,000+ U.S. listed ETFs. The portfolio composition file lists the names and quantities of securities, cash, and/or other assets that comprise the creation or redemption basket an ETF receives or delivers in exchange for the next trading days' ETF shares. The service also includes "Full Fund holdings" for 50%+ of the covered ETFs. "Full fund holdings" include a complete list of underlying assets and quantities held by the fund, including cash and/or any securities not included in the creation or redemption baskets.

As the number of ETFs rises, researchers, traders, risk managers, and compliance groups, rely on DTCC's ETF Portfolio Data service for efficient and reliable access to ETFs and their underlying components.

HOW IT WORKS

- 1. 9 ETF Agents representing over 90 sponsors send data to DTCC.
- 2. DTCC enhances the ETF data with the following indicators:
 - > ETF Portfolio create and redeem eligibility.
 - ETF Portfolio and Component Security' Continuous Net Settlement (CNS) eligibility.
 - > CNS-eligible components undergoing corporate actions.
 - > Carry-forward of a prior day's portfolio.

- **3.** DTCC distributes the ETF daily output at the end of the processing day (Trade Date-1).
- 4. Supplemental Files (including updated or added portfolios).
 - Near-Real-Time (optional) is distributed upon receipt of Trade Date from 12:30 a.m. ET to 12:00 p.m. ET.
 - Batch is distributed at approximately 1:00 p.m. ET on Trade Date.
- 5. DTCC updates ETF historical data at the processing day end (Trade Date).
- 6. Exchange-Traded Notes are not included.

DELIVERY

Users can review portfolio files online through the ETF portal or via a data file. Additionally, this information can be distributed automatically through a variety of secured transmission options giving you immediate access to the daily and historical portfolio files.

- > Daily ETF File 10:00 p.m. ET
- > Supplemental ETF Files
 - Near-Real Time: Upon receipt from 12:00 a.m. ET to 12:00 p.m. ET
 - > Batch: 12:00 p.m. ET
- > Web interface (for on-demand access)
- > Via SFTP



PROCESSING OF THE ETF PORTFOLIO COMPOSITION FILE (PCF)

Financial Markets. Forward.[™]

BENEFITS

TIME EFFICIENCY	Receive a comprehensive and consolidated industry ETF portfolio file from one source.
CONFIGURABLE	Specify the ETF portfolios included in your data feed to streamline analysis.
MARKET INTELLIGENCE	Calculate fund flows and mine market data to identify and inform trading strategies.
REDUCED RISK	Manage exposure and risk by identifying all ETFs containing a particular security.
HISTORICAL ANALYSIS	Calculate fund flows and view ETF portfolio changes over time.
TIMELY ALERTS	Stay informed through automatic notification of new and updated ETF portfolios.
EASE OF USE	Export ETF data for easy manipulation in existing systems.

DATA COVERAGE

The ETF portfolio composition file includes all U.S. listed ETFs and their underlying constituents (over 3,000+; 70% U.S. and 30% non-U.S. funds). Non-U.S. funds - ETFs where the majority of the basket components are ineligible to clear through NSCC are designated as Foreign Portfolios.*

View list of available ETFs

* Disclaimer: ETF PCF does not contain Exchange Traded Notes. ETFs backed by physical commodities, such as GLD and WEAT, may or may not be included depending on the preference of the issuer to illustrate the value of the commodities within the basket. Baskets with components that are not exchanged in-kind may be represented by cash.

HISTORICAL DATA

DTCC has a historical data set available from November 2007 to the present to facilitate ETF market trend and performance analysis of the ETF market.

FOR MORE INFORMATION

To learn more, visit DTCC.com/Data-Services or contact DTCC Data Services Client Support:

1-888-382-2721, Option 8