WMBA CTDI CHINA ENERGY INDEX

CTD Indices

Index Overview

The WMBA CTDI China Energy Index is an energy focused index comprised of liquid energy commodities. The index comprises of three energy commodities currently traded on the Chinese futures exchanges: crude oil, fuel oil, and thermal coal.

The WMBA CTDI China Energy Index is weighted by relative liquidity based on the 60 days average total dollar value traded (TDVT) of contract size. Here, the total dollar value traded (TDVT) of contract size is defined as the contract size of futures multiplied by its futures price.

Index Objective: Benchmarking China's Economy

The WMBA CTDI China Energy Index is the most effective tool to track China's energy consumption and industrial activity. As China's economy shifts away from an export oriented economy to one of domestic consumption, traditional macroeconomic export data will decline in importance as a barometer of China's economic success.

In the future, tracking China's energy consumption is the better benchmark to assess Chinese economic health. Why? Energy requirements drive manufacturing output, the foundation of the domestic consumption economy.
These sectors are equally weighted within the index and are rebalanced monthly.

A Traders' Market

WMBA China Energy Index serves the interests of traders, allowing them to benchmark Chinese economic activity in a more sensitive manner. It provides a transparent window for trading Chinese linked equities and commodities futures.

Our indices have value for all users needing an accurate benchmark of China's economic state, with the confidence of utilizing indices created to the standards set by the IOSCO Principles.

Country of Listing. All commodities are listed contracts on all 4 Chinese futures exchanges.

The exchanges are:

中国金融期货交易所 China Financial Futures Exchange

大连商品交易所 DALIAN COMMODITY EXCHANGE

上海期货交易所 SHANGHAI FUTURES EXCHANGE

郑州商品交易所 Zhengzhou Commodity Exchange

This means all data used in the calculation of WMBA CTDI indices is based upon ‘observable transactions’

Weighting Scheme:

Step 1 – Liquidity Weighting

- The individual commodities in the WMBA CTDI China Energy Index are market cap weighted.
- The liquidity measure used is the Total Dollar Value Traded (TDVT) of contract size.
- A effective TDVT of the TDVTs is used to determine the effective TDVT for each of the futures in the index. The calculation of the effective TDTV is as follows.

$$TDVT_{i,t} = \sum_{j=0}^{239} TV_{i,t-j} * Close_{i,t}$$

where $TV_{i,t}$ and $Close_{i,t}$ represent the trading volume and close price for contract *i* at date *t*, respectively.

- The individual weights of commodity *i* within the component *j* are computed every trading day and obtained using the calculation:

$$Weight_{i,t} = \frac{TDVT_{i,t}}{\sum_i TDVT_{i,t}}$$

Step 1. Rate of Return

After computing the weights of each component futures, we then derive the weighted rate of return of the futures using the formula

$$Return\_Index_t = \sum_i Weight_{i,t} \times Return_{i,t}$$

Step 2. Index basing

- The index base is 100
- The base date of the index is Sep. 23, 2019
- Calculation of the daily index is then based on the below formula

$$Index_t = Index_{t-1} \times Return\_Index_t$$

Step 3. Index Update Frequency

Indices are calculated and released on a daily basis

WMBA CTDI CHINA ENERGY INDEX

WMBA CTDI CHINA ENERGY INDEX vs CHINA A50 INDEX vs CHINA GDP

CTD Indices

- Equity isn't best measure of economic activity, especially during a period of fiscal and monetary stimulus being pumped into the market
- Energy commodities are a better measurement of true economic activity, and therefore, a better feed into other macro projections
- Since GDP's a lagging data point, WMBA CTDI China Energy Index can be a live tracker of economic activity, offering better insights before GDP is released
- True economic activity continues it's slow climb back to levels prior to COVID, but equity market valuations seem to have overextended itself prematurely compared to economic fundamental