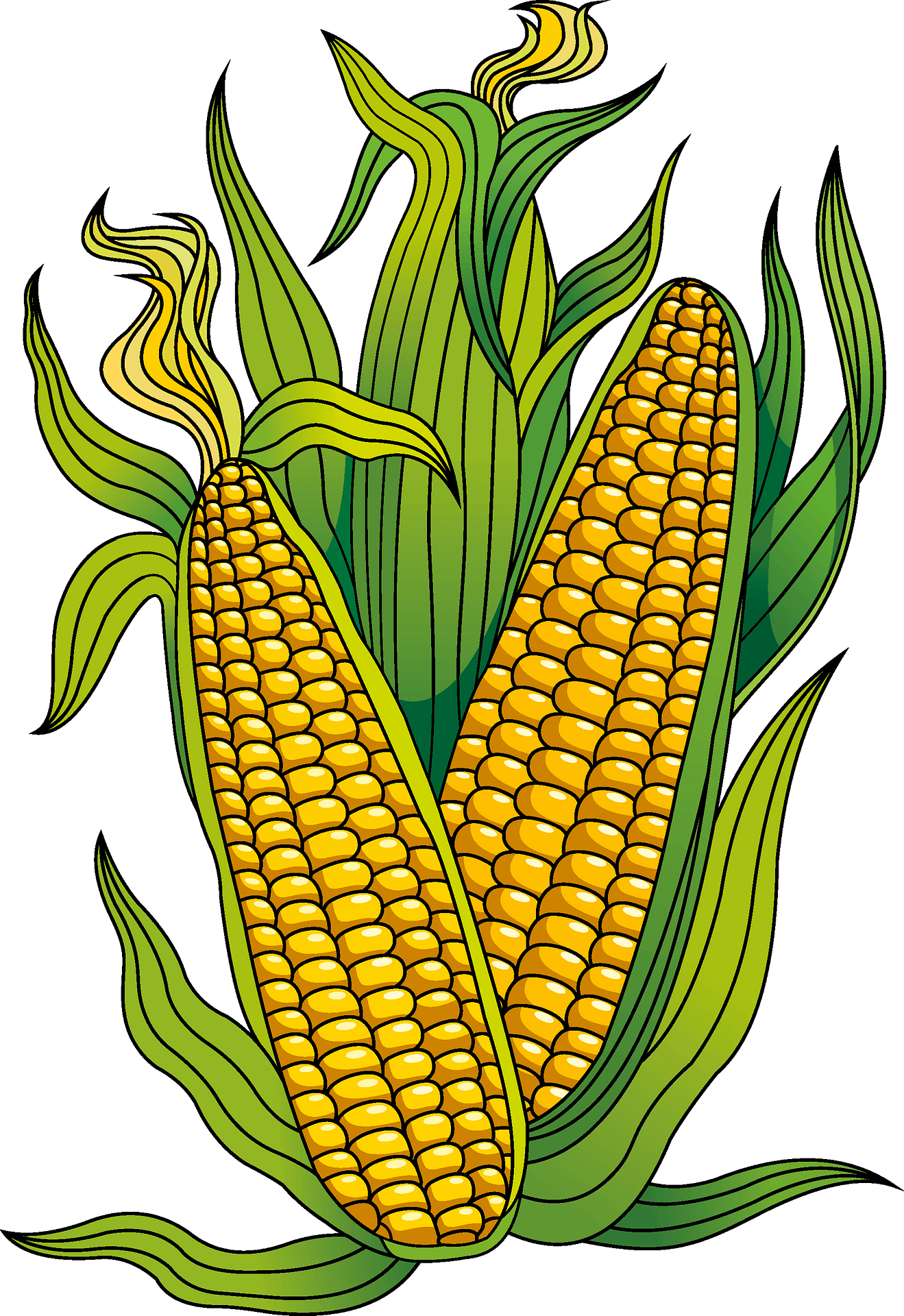
**Student: Yeyi Billa Instructor:** **Sintim Aboagye, Hermann**

**FINC430\_01FA20: FUTURES/OPTIONS/DERIVATIVES **

**Date: 12/07/2020**

Margin & Exchange Analysis Project



Commodity Assigned: **Corn**  

Stock Exchange: **Chicago Board of Trade (CBOT)** ****

The Chicago board of trade (CBOT) is an American stock exchange headquartered in Chicago. Founded in 1848, the CBOT is the oldest trading exchange in the world and is now part of Chicago Mercantile Exchange (CME) Group following its acquisition on July 12, 2007. In 1992, Because of market share loss, CME group included CBOT launched online trading applications. From 1992 to 2004, one billion futures contracts were traded electronically on CME Globex platform and the trades represented 61% of all CME volume. In 2015, 99% of all futures contracts traded on the CME were made electronically.

* Typical Derivatives traded

The CBOT is a stock market where derivatives such as options and futures on commodities including agricultural products, energy and gold on stock market index, euro-dollar exchange rate, Treasury bills, interest rate swaps, US Treasury Bonds or Treasury Bonds with maturities of 2, 5, 10 & 30 years.

* Procedures

The exchanges in the CBOT take place via open outcry in one of its many octagonal pits. Pit traders announce how many contracts they want to buy or sell and the price they want to pay or receive. They use their fingers to indicate the amount of contracts. The trader tries to sell contracts when his palm is facing and when the merchant's palm is facing, he is buying. Recently, the CBOT introduced electronic commerce and investors can now trade using either the open outcry (from 7:20 a.m. to 3:15 p.m. Monday through Friday) or the electronic method (Monday through Friday, trading day lasts 22 hours). We must have a membership to trade the products.

* Trading Rules

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Commodities** | **Size of contract** | **Expiry dates** | **Warehousing arrangements** | **Contract grades of security** |
| 1-Wheat Futures | 5,000 bushels | Trading ends on the last business day Friday of the month prior to the contract month preceded by at least 2 business days, and close begins at 12:00 PM and trading is allowed for 1mn maximum. | The Chicago Switching District, the Burns Harbor, Indiana Switching District, the Northwest Ohio Territory, the St. Louis – Alton Territory, on the Ohio River, on the Mississippi River or the Toledo, Ohio Switching District. | At 3¢ Premium: No. 1 Soft Red Winter, No. 1 Hard Red Winter, No. 1 Hard Red Winter, No. 1 Dark Northern Spring; At Contract Price: No. 2 Soft Red Winter, No. 2 Hard Red Winter, No. 2 Dark Northern Spring, No. 2 Northern Spring |
| 2- Mini-Sized Soybean Futures | 1,000 bushels | Trading ends on the last business day Friday of the month prior to the contract month preceded by at least 2 business days, and close begins at 12:00 PM and trading is allowed for 1mn maximum. | At contract price: Chicago Switching  District or the Burns Harbor, Indiana Switching District; At 4.75¢ /bushel: Lockport-Seneca Shipping District; At 6.25¢ /bushel: Ottawa-Chillicothe Shipping District; At 8.75¢ /bushel: Peoria-Pekin Shipping District | No. 2 yellow soybeans at par, No. 1 yellow soybeans at 6 cents per bushel over contract price, or No. 3 yellow soybeans at 6 cents per bushel under contract price provided that all factors equal U.S. No. 2 |
| 3- Soybean Meal Futures | 100 tons (2,000 pounds per ton) | The business day preceding the 15th calendar day of deliverable current month | the Central Territory (i.e. Bloomington, IL ), Northeast Territory, Mid-South Territory, Missouri Territory, Eastern Iowa Territory, or Northern Territory | 47.5% Protein Soybean Meal with following specifications: Protein minimum 47.5%, Fat minimum 0.5%, Fiber maximum 3.5%, Moisture (when shipped by Processor) maximum 12.0% |
| 4- Mini-sized Corn Future | 1,000 bushels | On the last day of trading in an expiring future, the close at 12 o'clock noon and trading shall be permitted thereafter 1mn | Chicago Switching District or the Burns Harbor, Indiana Switching District | No. 2 yellow corn at par, No. 1 yellow corn at 1½ cents per bushel, No. 3 yellow corn at between 2 and 4 cents per bushel |
| 5- Rough Rice Futures | 2,000 hundredweight (200,000 pounds) | The business day preceding the 15th calendar day of deliverable current month | Arkansas counties of Craighead, Jackson, Poinsett, Woodruff, Cross, St. Francis, Lonoke, Prairie, Monroe, Jefferson, Arkansas and Desha | U.S. No. 2 or better long grain Rough Rice, No heat-damaged & No stained are permitted in a 500-gram sample. A maximum of 75 lightly discolored are permitted in a 500-gram sample |
| 6- Oat Futures | 5,000 bushels | The business day preceding the 15th calendar day of deliverable current month | Chicago Switching District, Burns Harbor, Indiana Switching District, the Minneapolis, Minnesota Switching District, or the St. Paul, Minnesota Switching District | No. 2 Heavy Oats or No. 1 Oats at par, No. 1 Extra Heavy Oats at 7 cents per bushel over contract price, No. 2 Extra Heavy Oats at 4 cents per bushel, No. 1 Heavy Oats at 3 cents per bushel, or No. 2(36 pound total minimum test weight) at 3 cents per bushel |
| 7- Mini-Sized Wheat Futures | 1,000 bushels | The business day preceding the 15th calendar day of deliverable current month | Chicago Switching District, the Burns Harbor, Indiana Switching District, on the Ohio River, or the Toledo, Ohio Switching | No. 2 Soft Red Winter, No. 2 Hard Red Winter, No. 2 Dark Northern Spring, and No. 2 Northern Spring at par; and No. 1 Soft Red Winter, No. 1 Hard Red Winter, No. 1 Dark Northern Spring and No. 1 Northern Spring at 3 cents per bushel |
| 8- KC HRW Wheat Futures | 5,000 bushels | The business day preceding the 15th calendar day of deliverable current month | Kansas City, Missouri/Kansas, Wichita Kansas, n Hutchinson Kansas, Salina/Abilene, Kansas. | No. 1 Hard Red Winter Wheat 11% protein level or higher deliverable at 1.5¢/ bushel. No. 2 Hard Red Winter Wheat with 11% protein level or higher deliverable at contract price. All above grades are deliverable at protein levels equal to or greater than 10.5% but less than 11% at a 10¢/ bushel |
| 9- Soybean Oil Futures | 60,000 lbs | The business day preceding the 15th calendar day of deliverable current month | Illinois Territory at contract price.  At 1¢/pound: Eastern Territory at 20/100ths; Eastern Iowa at 150/100ths; Southwest Territory at 135/100ths; Western Territory at 5/100ths;Northern Territory at 155/100ths | Expeller pressed, expeller pressed degummed, solvent extracted, or solvent extracted degummed. Mixtures of one type with any other |
| 10-Mini-Sized Wheat Futures | 1,000 bushels | The business day preceding the 15th calendar day of deliverable current month | Chicago Switching District, the Burns Harbor, Indiana Switching District, on the Ohio River, or the Toledo, Ohio Switching | At 3¢ Premium: No. 1 Soft Red Winter, No. 1 Hard Red Winter, No. 1 Hard Red Winter, No. 1 Dark Northern Spring; At Contract Price: No. 2 Soft Red Winter, No. 2 Hard Red Winter, No. 2 Dark Northern Spring, No. 2 Northern Spring |

* How does exchange prepare for defaults?

According to CME Group chapter 8, if a CBOT Clearing Member fails to fulfill any obligation to the Clearing House or files bankruptcy, the Clearing House may declare this Clearing Member in default. In the event of default, the Basic Guarantee will be applied by the clearing house to pay any loss to the clearing house associated with such default or loss. If the contribution or the performance bond relating to the products of the Basic Guarantee Fund, and other assets of a defaulting clearing member available to the Clearing House are insufficient to meet all of its obligations owed to the Clearing House, the Clearing House will pay all claims, which will be considered a liability of the defaulting member towards the clearing house, which the clearing house can recover from any other assets of that clearing member or by process.

**3- Work done in attached excel sheet.**

**4- Any recent developments in these exchanges & reasons for changes**

The CME group, including the CBOT, plan on adopting the SPAN 2 framework and also the existing SPAN as diversified portfolios margins in the next few years. The will provide compensation for the products subject to the SPAN and SPAN 2 change. The SPAN 2 will help enhancing the risk management capabilities in a single interface while keeping the current SPAN functions by adding new modeling, reporting and margin replication enhancements. Moreover, the initial and maintenance margin for gold futures were subject to incremental changes, from respectively $5,500 and $5,000 as of January 10, 2020, to $7,700 and $7,000 on March 24, 2020 at the clearing house. The purpose of this change was to accommodate for market volatility.

**Word Cited**

<https://www.cmegroup.com/rulebook/CBOT/>

<https://www.fxcm.com/markets/insights/evolution-of-the-marketplace-from-open-outcry-to-electronic-trading/>