

**THE PRINCIPLES AND THE SPECIFICS OF TRADING  
IN COMMODITIES**

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**Abstract**

*In the present period of instability on financial markets, investments in commodities are the solution for elimination of the consequences of inflation and ensure the yield. When investing in commodities, the use of specifics of commodities compared to other assets. The distribution of commodities we can interpret for agricultural commodities, commodities of energy, precious and other metals, and weather. Therefore, in the framework of the investment portfolio are the commodities. This is the reason why one of the most popular types of investment assets now become commodities. In the interpretation of particular commodities we talk about commodity futures. The reason is that the spot market with commodities is limited storage facilities. The growth of the popularity, which allows a wide range of commodities, has caused that in addition to from institutional investors and speculators for trade may involve even small investors. This development will be supplemented by interpretation of the charts and figers, which will be commented and used for generalization of knowledge. Finally, the article will be interpreted by the further development of the market for commodities as it by article assumes from the results of research.*

**Key words**

*commodity, futures, investments, liquidity, inflation, financial market, portfolio, risk, metal.*

**Introduction**

Investments in commodity markets are still considered to be unusual by the general public. Within financial markets there was a long period in which trading on commodity markets remained in the background. The reason for this being in subdued trading with low prices of commodities and limited opportunities for small investors to participate on the market. Despite of that in the last period commodities have increasingly been gaining attractiveness as valuable investments for many investors. This change in thinking of small investors led to the growth of popularity of trading with commodities. At the same time the

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product range of this market has been significantly democratized and smaller investors have also been allowed to participate on trading with a segment that was formally exclusively designed for corporate clients and speculators with large volumes of investments. There are many possibilities to get involved and to take part at the incomes of the worldwide growth of prices of commodities, as well as views and opinions on each type of investments into commodities. There are several options to take advantage of growing prices of commodities on both prompt and forward markets. The most significant and widespread terminated trading are derivative securities futures.

### **Futures contracts**

Futures is a standardized forward traded on derivative exchange. Practically, it is a contract for settlement (exchange and delivery) of underlying instruments at a certain date in the future, while the settlement period is longer compared to the practice on spot market (2, pg. 186). Futures contract is an agreement between two parties to buy or sell certain underlying instrument in standardized quantity of a prior specified quality at a certain date in the future, i.e. at the so called contracted delivery month, and at a predetermined date. (1, pg. 29).

The interested traders do not have the option to withdraw from the contract. Futures contracts are traded on public derivative exchange.

### **The development of futures**

The first standardized futures exchange market was founded in the USA, in big cities like Buffalo and New York. However, the development of modern futures began in Chicago in 1840. Chicago exchanges arose when large fertile prairies of Midwest were sown with corn. This area was interesting for its location and construction of railway. Thus in the mid 19th century Chicago became the crossroad and the centre of trade between farmers and lacking people from the eastern coast of the USA. These factors gradually lead to formation of central market. During this period trade, that took place here, was inefficient and disorganized.

Fluctuation was great, prices ranged from one extreme to the other. In the time of harvest prices would fall and the bigger the harvest was the lower the prices were. As consequence of this situation, the lack of place for storage and the absence of long term storage resulted in corn and wheat rotten in the streets or on fields. Trading worked as a cash market –corn and wheat was delivered and paid on spot. This phenomenon – seasonality, caused that commodities, which the population inevitably needed the following spring when there was a lack of supply, became inaccessible basic necessities. Prices of these commodities would grow exponentially. Traders and brokers safeguarded against changes in price so, that they paid very little to farmers while on the other hand sold these product to consumers at significantly higher prices. We find in historical documents that in 1848 a group of 82 businessmen founded the first commodity exchange Board of Trade of the City of Chicago (CBOT). At this commodity exchange trading was carried out initially only on cash markets. Producers and dealers soon realised the benefits of contracts for sale or purchase in the near future, the so-called “to arrive” contracts. These contracts allowed buyers and sellers to determine the supply of a selected commodity at prior agreed upon price and fixed deadline of transaction. These contracts, which helped buyers and sellers in long-term planning are known as forward contracts (2, pg. 101). In the same time, with the increasing number of forward contracts their shortcomings emerged to the surface. There were deficiencies as

failure to fulfil obligations, deadlines, quality of supply, as well as the complexity of negotiation of these contracts. This was the reason, why the Board of Trade of the City of Chicago (CBOT) decided to make forward trading more effective and to unify it in terms of quantity, quality of delivery, dates and place of delivery of the commodity. According to this, in 1865 trading was standardized. Since then these contracts have been called futures contracts. These standardized forward contracts unlike other forwards have been possible to trade only at designated times. Another difference was that the offer and the negotiated prices of deals have been published. The only variable element remained the price. Standardization of contracts and the possibility for compensation of position caused that people who wanted to decrease losses from the closed position, could compensate futures contracts with participating in opposite trade: purchase of contract which they have sold before or sale of the contract they have bought. The main benefit of futures was clear, so over the next decades further futures exchanges have been founded in the USA. Regardless of that that Chicago has become the most influential and dominant place for trading futures in the USA (2, pg. 91).

### **Division of commodities**

The first underlying asset of futures contracts were agricultural crops. During the twentieth century new financial instruments were formed – financial futures. Regardless of the fact that the volume of purchases of these financial futures contracts far exceed the volume of transaction with commodities, contracts are included into the field of commodity trading. According to this, the term commodity is used for all futures contracts.

#### **- Types of Agricultural Commodities**

- ***Agricultural commodities of plant origin:*** soybeans, soybean oil, soybean meal, rapeseed, crude palm oil, corn, oats, barley, wheat, rice, cocoa, coffee, cotton, wood, orange concentrate, sugar, wool, silk, etc.
- ***Agricultural livestock commodities:*** fattening beef, beef for slaughter, whole hogs, pork sides, milk, butter, cheese, etc.

#### **- Energy Commodities**

- ***Energy commodities:*** crude oil, gasoline, heating oil, natural gas, emission allowances, kerosene, electricity, coal and so on.

#### **- Types of Metal Commodities**

- ***Precious metal:*** gold, silver, platinum, palladium
- ***Industrial metal:*** copper, lead, aluminium, zinc, tin, nickel, uranium, etc.

#### **- Weather**

- Temperature, snow, frost, rainfall, hurricanes, etc.

#### **- Financial Instruments**

- ***Equity indexes:*** Dow Jones, S&P 500, E-mini S&P 500, Nasdaq 100, Russell, E-mini NASDAQ-100 Futures, Nikkei 225, FTSE, SMI, EuroStoxx 50, US Dollar index, etc.
- ***Commodity indexes:*** Rogers International Commodity index, Dow Jones - UBS Commodity Index, Goldman Sachs Commodity Index (S&P GSCI), Thomson Reuters/Jefferies CRB Index, CRB Continuous Commodity Total Return Index, etc.

- **Currencies:** U.S. dollar, Australian dollar, British pound sterling, Canadian dollar, Euro, Japanese yen, Swiss franc, Swedish krona, Mexican pesos, etc.
- **Bonds and interest rates:** 90Day T-Bills 90, T-Notes 2yrs, 5yrs, 10yrs, US TBonds, 3mo Eurodolar, 3mo Euroyen, Libor 1 mo, F-funds 30 day, Bondfuture, etc.

### Specification of futures contracts

Regardless of the type of investment or commodity contract it is important for investors to have as much information about their investment activities as possible, and in particular, clearly understandable information. It is necessary to note again that futures are always standardized. Meanwhile, there are significant differences between futures contracts, which can ultimately affect the outcome of the investment.

#### SHOWS THE SPECIFICATION OF FUTURES CONTRACTS ON AGRICULTURAL CROP – CORN

Table 1

##### Corn Futures

Contract Size	5,000 bushels (~ 127 Metric Tons)	
Deliverable Grade	#2 Yellow at contract Price, #1 Yellow at a 1.5 cent/bushel premium #3 Yellow at a 1.5 cent/bushel discount	
Pricing Unit	Cents per bushel	
Tick Size (minimum fluctuation)	1/4 of one cent per bushel (\$12.50 per contract)	
Contract Months/Symbols	March (H), May (K), July (N), September (U) & December (Z)	
Trading Hours	CME Globex (Electronic Platform)	6:00 pm - 7:15 am and 9:30 am - 1:15 pm central time, Sunday - Friday Central Time
	Open Outcry (Trading Floor)	9:30 am - 1:15 pm Monday - Friday Central Time
Daily Price Limit	\$0.30 per bushel expandable to \$0.45 and then to \$0.70 when the market closes at limit bid or limit offer. There shall be no price limits on the current month contract on or after the second business day preceding the first day of the delivery month.	
Settlement Procedure	Physical Delivery	
Last Trade Date	The business day prior to the 15th calendar day of the contract month.	
Last Delivery Date	Second business day following the last trading day of the delivery month.	
Product Ticker Symbols	CME Globex (Electronic Platform)	ZC C=Clearing
	Open Outcry (Trading Floor)	C

Table no 1: Specification of futures contract on corn  
Source: [12]

### ***Contract size***

Contract Size indicates the amount of the purchased commodity of one futures contract. The exchange firmly fixes the amount of underlying assets it represents for each contract. For example, grains are traded in standardized units of 5000 bushels per contract (purchase of one grain contract is equal to purchase of 5000 bushels of grain.), for gold it is 100 troy ounces, for coffee 37 500 pounds, etc.

Contract size is the product of price and volume of the underlying asset. Specifically, if for example, the trading price of grain was 6 USD, this price would refer to one unit of measure. Contract size would thus be 5000 bushels x 6 USD, i.e. 30 000 USD. .

### ***Product tickers symbols***

All futures contracts have a determined unique one or two letter code for accurate identification. These symbols are especially important when entering orders for electronic trading. An error in entering can cause confusion, which may lead to major problems for the trader. Commodity Exchange also sets the quality standards for a given commodity, date and place of delivery of the commodity, terms of payment, which are required to keep.

### ***Contract months symbols***

According to the rules of trading on commodity exchanges particular commodities can be purchased with different dates of delivery even some years ahead. The list of months in which the commodity is traded is called the expiration cycle of a contract. Each month has its own abbreviation: January – F, February – G, March – H, April –J, May – K, June – N, August – Q, September – U, October – V, November – X and December – Z.

### ***Last trade date***

Last Trade Date or LTD is the absolutely last date when an investor can dispose of a contract and so avoid taking the commodity over physically. In addition to LTD, each futures contract has its own FND – First Notice Date, which is the date when the contract holders are notified, that they possess a contract for purchase of a given commodity. Traders, who are not interested in the physical delivery of the commodity, hold their position as long as possible, i.e. until the date of FND. Once FND is approaching, investors sell their contracts, so they dispose of the commitment to take the commodity over physically. According to experience, we can state that very few trades with commodities result in actual physical transfer. In this sense, we can distinguish two types of futures contracts.

First, there are contracts, which provide physical delivery of a particular commodity. The majority of speculators in the futures markets decide to realize their incomes or losses by purchasing or selling compensation futures contracts before the FND.

Some futures contracts progress typically on the basis of cash settlement and not physical transfer. As an example, we can mention a situation when a trader holds a position in a stock futures contract until its maturity. So, he simply receives (or pays) the final profit or loss based on the difference between the input and final buffer price (3, pg. 24).

### ***Daily price limit***

For each commodity, Exchanges set a daily price limit, which limits the volatility of prices during one day (Daily Price Limit). It is the maximum price deviation from the closing price the day before. The reason of introducing price limits is the limitation of the very high price volatility, or possible price manipulation. If the price moves beyond the price limit, trading is usually suspended to give traders enough time to calm down. Price limits also provide the clearing centre enough time to ensure larger additional margins from traders who have had losses. With increasing market volatility, limits are subject to change. We know that some

commodities do not have a stated limit for the last month of trading. Reasons of these limit movements come from several reports, or catastrophic news and the sudden onset of panic on the market (2, pg. 194).

**Tick size**

Tick is the minimum price movement, the smallest unit set for each commodity by which the contract price can move up or down. It is understood that different commodities have different minimums. As an example we can mention the commodity – grains. Their tick is ¼ of one cent per bushel. One contract is 5000 bushels of grain, the minimum price movement – tick size for a contract is therefore  $0.0025 \times 5000 = \$12.50$ .

Chart no. 1 shows the range of daily movement of futures contracts of agricultural commodity – sugar.



Chart no. 1: Range of daily movement of futures contracts on sugar.  
Source: [13]

On the chart we can see the range of daily movement from 7.70 to 8.00 points. At the same time, according to the tick values in the chart, we know, that the minimal movement of sugar is 1/100 cent/lb and this movement is worth \$11.20 (112 000 pounds  $\times$  0.0001). Price of sugar changes in hundredth – the smallest price movement is from 7.65 to 7.66. The minimum value of this movement is \$11.20. Change of a single point (e.g. from 7.65 to 8.65) is worth \$1 120. In the chart no. 1 the price grew by 30 cents from 7.70 to 8.00. With the value of \$11.22 per cent this price movement results in the value of  $30 \times 11.20 = \$ 336$ . The range of daily movement according the chart is \$336 this day (14)

**Scrolling position**

Each futures contract has a given maturity. That means that we cannot hold it indefinitely. After the last month, all contracts that fall into the month are settled. If a trader with futures contracts is not interested in physical delivery of the actual commodity, at the same time he wants to keep his open position, he has to sell and buy (or buy and sell) the contract in a further contract month. This procedure is called rolling futures contracts. This relatively

common situation is known as Contango. In such case, the spot price of the underlying instrument is higher than any forward price of the underlying instrument. That means that contracts with a remote expiry date are more expensive than current contracts. This situation arises when the maturity date is longer, so interest expenses become higher (financial expenses) and the cost of storing the underlying asset rises, too. For an agreement investor it is a problem, especially in the case of index investing. The consequence for the investor is that he may have a loss of several percent of his investment. The opposite of Contango is Backwardiation. In case of Backwardiation the price of a contract with a more remote maturity is lower than the price of a contract with a shorter maturity date. This condition leads to an abnormal positive impulse on the market, expressed by low demand or major offer of the underlying asset. In that case the investor has significant incomes, but such situation is very rare.

### Conclusion

In the article, we introduced basic principles of commodity trading. We also represented some of specifics of trading with commodities. We interpreted the procedure and changes in commodity trading from physical form to trading with futures contracts representing derivative securities. Insignificant trading with commodities was mainly caused by low prices of commodities and limited possibilities for small investors to participate in commodity market. Nowadays, commodities are becoming more and more popular investment opportunities for small investors. The wide variety of products on this market has significantly democratized the market and allowed small investors to participate in trading with a segment that was previously reachable only for institutional investors and speculators with large volumes of investments.

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