

Introduction: The HOFSTRA-NYMEX HIGH SCHOOL CHALLENGE

A market is any place where buyers and sellers can meet to trade goods or services. One new market that is familiar to many people is EBay. Markets have been bringing buyers and sellers together for thousands of years. They tend to develop in response to a society's economic needs. The New York Mercantile Exchange (NYMEX) is one such market. It was founded in 1873, as the Butter and Cheese Exchange. Over the years, the exchange has evolved from one that sold butter, cheese and then eggs for cash and immediate delivery to one that specializes in futures contracts.

The purpose of the HOFSTRA/NYMEX High School Challenge is to help you to learn about the exchange, the products bought and sold there, and how trading actually takes place. A second purpose is to tell you about career opportunities at the NYMEX.

During your two visits to Hofstra you will learn about Futures Contracts, and then the characteristics of a specific contract traded at the NYMEX: Crude Oil Futures. Then, you will learn how crude oil contracts are traded. There are two trading methods used at NYMEX: open outcry trading and electronic trading. Over the next 2 weeks, you will learn about open outcry trading and electronic trading by simulating each type. Professionals who work at the NYMEX will teach you how to use the exchange's electronic trading system on January 4. On January 11, you will learn how to conduct open outcry trading. Once you learn how to trade, the two representatives from your school will take part in a trading competition along with the students from other participating high schools. The top 3 teams will receive prizes.

In these pages, we will briefly describe the first 50 years of the NYMEX's history, (1873-1925) (Part 1) skip the next 50 years, and pick up again in the 1970's when the world was undergoing an energy crisis (Part 2) At that point, we will show how the energy crisis created new opportunities for trading at the exchange and new opportunities for investors to protect themselves from rising energy prices.

On January 4, 2008, we will distribute a booklet provided by NYMEX that details Exchange's history from 1873-today.

Part I: The New York Mercantile Exchange: 1872-1934

The market that is now the New York Mercantile Exchange (NYMEX) was founded in May 1872, by sixty-two dairy merchants. In June, 1873, the same group chartered the Butter and Cheese Merchant's Exchange to organize the daily trade of butter and cheese.¹ The merchants believed the trade of these products was poorly organized and that greater efficiency in trading would stimulate growth of the industry in New York City. The exchange was located on the corner of Reade and Chambers Streets in lower Manhattan because the produce was expected to arrive in New York via ships that docked in Hudson Bay² or by rail on Manhattan's West Side.³ The Association's stated purpose was to provide a forum for "daily intercourse between those persons" interested in the butter and cheese trade.⁴ According to the original charter, still hanging in the exchange today, the association would strive to foster trade, to provide reliable information about the markets, reform abuses, settle disputes, promote fellowship among members, and provide funds for the widows of members.⁵ Purchases and sales at the exchange were made in cash, with immediate delivery expected. However, credit rules adopted by the exchange permitted a 10 day delay in payment for butter and cheese and, later a 7 day delay in payment for eggs.⁶ (This is referred to as "trade credit.")

By January 1875, the Exchange was successfully meeting at least some of its objectives: the New York Times credited it with reducing the size of price changes for a pound of butter from five cents to one or two cents (a significant reduction) and for providing its members with accurate information about the markets for butter, cheese and eggs.^{7,8} And, other reports in the New York Times indicated the Exchange also successfully promoted fellowship among its members, hosting outings and parties over the years.

By 1881, the exchange had grown, expanding its membership to 150 merchants. In recognition of the egg market's increasing importance, the exchange was renamed, The Butter, Cheese and Egg Exchange. The Exchange wanted to continue its growth. By year's end, it had reached out to merchants who could not afford to join higher priced, competitor exchanges (i.e. the Produce Exchange) ostensibly to help them become competitive players in the produce markets. The exchange indicated its goal was to provide these merchants with "correct statistical and other info

¹ The eXchange of Change: An Illustrated History of the NY Mercantile Exchange, New York Mercantile Exchange, Inc. P. 10.

² "Butter and Cheese Merchant's Exchange," The New York Times' Historical Newspaper, June 5, 1873 P.8.

³ Op.cit. The eXchange of Change, P.12.

⁴ Op.cit. The New York Times, June 5, 1873 P.8.

⁵ The Exchange of Change: An Illustrated 130 Year History of the NY Mercantile Exchange, pp. 10-11 New York Mercantile Exchange, Inc.

⁶ "Credit Rules of the Butter and Cheese Exchange," The New York Times Historical Newspaper. February 9, 1875 P. 9

⁷ "The Butter and Cheese Trade: Annual Meeting of the Exchange-Nomination of Officers," The New York Times' Historical Newspaper. December 29, 1881. P 3

⁸ IBID. A contradiction to the price change information appeared in the article cited above. In the article, the Times stated that the exchange had just abolished a rule requiring a minimum price change of five cents per pound in the price of butter and replacing it with a rule that required a minimum change of one to two cents per pound. 1.

(sic).”⁹ This was an admirable goal; markets and exchanges can only function well when all buyers and sellers have access to any information that would affect the value of a commodity traded. Further, information dissemination can prevent unfair trading practices.

In January, 1882, the exchanges’ initial fee rose from \$50 to \$200, and annual dues were fixed at \$75. At the same time, 800 certificates of membership were issued. These were quickly purchased and some were resold at premium prices. As a result, In February 1882, initiation fees were increased to \$500 per member.¹⁰ During 1882, merchants from the nut, dried fruit, poultry and canned goods industries became exchange members. In April, the exchange reported that it had 801 members, an annual income of \$20,000 and an \$80,000 surplus fund.¹¹ In recognition of its varied nature, exchange members changed its name to the New York Mercantile Exchange on June 5, 1882.¹²

By the end of the decade, the egg market took on increasing importance at the exchange. In 1890, the cash market (a market where purchases are made in cash and the item purchased is delivered “on the spot”) for butter and cheese had shrunk, and egg sales constituted the exchange’s primary business. At that time, some members proposed suspending “the call” on eggs. At “the call” retail traders were permitted to trade at the exchange. When the call took place, samples of merchandise were displayed at the exchange, with complete stocks held nearby so that a sale could be immediately completed. The exchanges’ account of its history indicates that trading volume at the call was small relative to the wholesale trade at the exchange.¹³ However, The New York Times reported that without the “egg call”... “more than a few” indicated the exchange might as well close (a marked difference from its prosperity from 10 years earlier). Further, the newspaper reported that some exchange members believed that too much retail business was conducted on the exchange, and that the prices paid for small quantities of eggs at the call fixed the price for sales of larger (wholesale) quantities. As a result unscrupulous buyers were able to manipulate prices.¹⁴ Later on, price manipulation appeared to be a major source of complaints about the call. Price manipulation, market cornering (acquiring most of the egg supply), and other complaints about market abuses would become recurring issues in the egg market and for the Mercantile Exchange. Abuses of this nature prevent a market from accomplishing an important function: determination of a commodity’s true value (assuming that price and value are equal) through supply and demand.

The call for eggs and the call for butter were suspended in 1895, and the exchange survived the change. However, one objective of those favoring abolition of the call was not met: traders were

⁹ Op.cit. The New York Times, December 29, 1881. P.3

¹⁰ “A Growing Exchange: The Butter, Cheese and Egg Exchange Secures New Headquarters,” The New York Times Historical Newspaper, February 10, 1882. P.3

¹¹ “Miscellaneous City News: Exchange Prospers,” The New York Times Historical Newspaper. April 28, 1882. P.3

¹² Op.Cit. eXchange of Change. P. 12

¹³ IBID. P. 18.

¹⁴ “Objecting to the Egg Call: A Petition by Members of the Mercantile Exchange” The New York Times’ Historical Newspaper. March 28, 1890. P.8

still permitted to announce exchange determined prices to the outside world,¹⁵ presumably fostering continued price manipulation. Following suspension of the call, members gathered on the exchange floor to participate in egg trading calling out bids (buying prices) and offerings (selling prices). The authorities at the exchange provided a big brass ring for members to stand around. A clerk sat at the center of the ring and recorded any sales made.¹⁶ The Times referred to the ring as a “pit.” Today, the NYMEX has multiple pits, and one commodity is traded at each one. The pits resemble rings with several layers (like stairs). Traders stand on the stairs to call out their orders, which are reinforced with hand signals that convey information about prices and quantities purchased. (A comparable action occurs at a football game when a referee calls out a penalty and simultaneously signals his decision by moving his arms.) After a trade takes place in the pit (a buyer and seller agree on a quantity and price) each trader records it a trading pad that are later cross checked for accuracy. Although it is exciting to watch, open outcry trading is disappearing, in favor of more efficient electronic trading.

Around the turn of the 20th Century (1900), the market for eggs was an important one. Eggs were considered an important staple in people’s lives. Consequently, a great deal of attention was given to fluctuations in egg production, (hens laid eggs in warm, not hot weather, and not when molting), egg storage (fresh, refrigerated, or limed) and egg quality (some merchants would hide rotten eggs among fresh ones and sell them as fresh). Exchanges were accused of manipulating egg prices, and of attempting to corner the market, (an effort to establish an egg monopoly) among other abuses.¹⁷ At about the same time, merchants at the Mercantile Exchange began buying and selling eggs for the “future.” A sale for the future was differs from a cash sale. When a cash sale is made, cash and goods are immediately exchanged. When a future sale is made, buyers and sellers establish all the terms needed to buy or sell a commodity, but cash and goods are exchanged at a future date. The specific date of the exchange is part of the agreement.¹⁸

An example of how a sale for the future might have worked follows:

On January 4, two merchants (a buyer of eggs and a seller of eggs) met on the exchange. The buyer wanted to acquire eggs, and wanted them delivered on February 4. The seller was willing to accommodate him/her. On January 4, the merchants agreed on the following aspects of the transaction: the size (12 dozen eggs), the price (32 cents per dozen), the quality (fresh) and where the eggs would be delivered (a RR car on Manhattan’s West Side).

¹⁵ “Call for Eggs and Butter Abolished” The New York Times’ Historical Newspaper. May 29, 1895. P.12

¹⁶ Op.Cit.eXchange of Change. PP.19-20.

¹⁷ “The Egg Market’s Crisis: No Corner but the Supply is Very Short.” The New York Times’ Historical Newspaper. January 14, 1902. P.7.

¹⁸ Buying and selling for the future was not a new practice. It is commonly known as buying and selling futures contracts. However, on the Mercantile Exchange, these appeared to have been informal contracts with no specifics or prices reported. After reviewing numerous articles from the New York Times Historical Newspaper for the period 1873-1925, we could find no reports of a formal egg futures contract nor any reported prices that would correspond to an egg futures contract prior to the 1920’s. A few references to “selling to the future” indicate that such trading occurred, but the nature of the contract and when it was available could not be determined.

Since the transaction would not be executed within 7 days, according to exchange rules, the buyer would have been required to make a partial payment on January 4 (called margin). Margin equals a small amount of the total due. On March 4, the seller will deliver the 12 dozen fresh eggs as promised and receive 32 cents per dozen as payment.

It is important to note that the obligations of the buyer and seller would not change, even if the price of eggs changed, or if the quantity of eggs available for delivery changed.

What did this transaction accomplish? By determining all the terms of a trade that would take place one month in the future, the buyer and seller did not have to worry about changes in the market price of eggs between January 4 and February 4. And, the buyer did not have to wonder if s/he would be able to buy 12 dozen eggs on February 4 if eggs became scarce. Nor did the seller have to worry that eggs would be so plentiful that s/he would be unable to sell 12 dozen eggs in a month. Of course, if egg prices drop before February 4, the buyer must still pay 32 cents per dozen, and the seller will be happy to receive the payment. On the other hand, if egg prices increase, the buyer will be happy to pay 32 cents per dozen, and the seller will have no choice but to sell the eggs at that price. Each one is willing to run that risk in exchange for fixing the transaction price. And, the buyer knows s/he will never pay more than 32 cents per dozen and the seller knows his/her receipts will never be less than that. This type of transaction is called a “hedge.”

Today, we would say the seller, “**sold a futures contract**” or is “short the futures”; the buyer “**bought a futures contract**” or is “long the futures.” The 32 cents per dozen payable in February is the February “**futures price**.” The eggs that will be delivered are the contract’s “**underlying asset**.”

In March 1902, the New York Times reported that NYMEX suspended trading in egg futures. The article provides some insight into the exchanges’ concerns about price manipulation and trade practices. It states:

“...The trouble arose early last week. The storms had caused the local prices of eggs to go up very high. They were selling on ‘Change for 31 cents a dozen. Nine-tenths’ of the members thought the price would go still higher and there was a general attempt to boom it. Suddenly, to the surprise of the bulls¹⁹, a certain firm began to sell eggs to be delivered a week later at 25 cents. There was great excitement on the floor. In

¹⁹ Bulls are traders who are optimistic and anticipate higher prices, bears are pessimistic and anticipate lower prices.

less than five minutes an offer for the same delivery at 24 cents was made. This created almost a panic. In another five minutes 23 cents was the figure and the buyers were plentiful. The day's transactions caused the local quotation to fall 8 cents, and the ones who were booming the figure were disconsolate.

It was later said by the firm which had offered the low prices that they had "inside information" from Kansas City to the effect that eggs would go down. In the meanwhile, the Egg Committee of the Exchange had a meeting and decided on a rule forbidding all further "egg futures." The bear firm contends that the committee was influenced by those who lost heavily. Anyway, the committee's recommendation was upheld by the Executive Committee and the rule was announced as a fixture on Monday morning...."²⁰

Later reports clearly indicate that the trading suspension was temporary. It is also clear that the Exchange's concern with price setting was ongoing and included the cash market in addition to the futures. In March 1904, the exchange implemented a new price setting procedure. According to the new procedure, commodity prices in the cash market would be set by a committee and not by trading prices as was the current practice. Each commodity would be overseen by a committee of 11 members who were "representative" of important operators in the industry. Committee membership was to rotate on a one month or three month basis, depending upon the commodity overseen. The committee would meet daily to set a trading price for the next 24 hours. An exchange official described the committee determined price as reflective of the "consensus of opinion of a company of experts....members ...are confident that the prices made by these committees are the most accurate possible."²¹

Despite the member's confidence, problems were encountered, among them a lawsuit by a member that restrained the exchange from issuing quotations that were not prices determined through transactions. Other problems included the committee's tendency to underprice, and inconsistent pricing across agreements. By 1912, the exchange eliminated the procedure.²²

The onset of World War I brought new concerns to the exchange. Price determination continued to pose problems, but now food hoarding (market cornering) was deemed unpatriotic. Exchanges such as the Chicago Board of Trade and the New York Butter and Egg Exchange suspended

²⁰ "Egg, Futures" Forbidden: New Rule of Mercantile Exchange Angers 125 Members." New York Times Historical Newspaper. March 6, 1902. P. 114

²¹ "Produce Prices Made Daily: How Mercantile Exchange Fixes Prices on Butter, Eggs and Cheese." New York Times Historical Newspaper. March 20, 1904. P. 15.

²² Op. Cit. eXchange of Change. P. 22.

futures trading as a “patriotic duty,” to protect citizens against a food shortage and higher prices that would come from food scarcity. The futures market was blamed for fueling price speculation and for enabling traders to buy and hoard for the future. The New York Mercantile Exchange did not suspend futures trading because it had a limit of 15 days on butter sales and 30 days on egg sales. The exchange thought that hoarding would not be a problem because of the short contract period.²³ Note that at this point, futures trading was a very small part of NYMEX’s business. The exchange was still primarily a cash market.

In the end of 1917, federal regulators turned their attention to the commodities markets, with special focus on speculation. At the time, speculation was considered analogous to “profiteering.” In June 1917, the Food Administration announced trading rules designed to eliminate all speculative trading in the cash and futures markets for commodities. And, the exchanges cooperated.²⁴

Today, speculators are considered to be essential participants in regulated futures markets. Speculators trade to profit from day to day or intraday price changes. Speculators provide continuous trading opportunities in the markets, and frequent trading helps to insure that quoted prices equal a commodity’s market value. Prices can change only as a consequence of trading. Speculators have a very different reason for participating in futures markets than the egg buyer and seller discussed earlier.

In 1923, the NYMEX introduced formal contracts for future sales of butter and eggs, termed “futures contracts,” although not all members approved of the change.²⁵ And, regulators again worried about whether “gambling” in egg markets raised prices. In October 1926, New York State’s Attorney General expressed concern that the egg supply would be cornered despite the exchange president’s assurance that he did not believe this would happen.²⁶ In June 1935, the Commodity Exchange Bill was passed at the federal level of government. This legislation enacted a number of measures to control excessive speculation, trading abuses, and also required some exchange employees to be licensed.²⁷

Until the 1960’s, NYMEX was primarily a market for cash transactions, although a few additional futures contracts were introduced, most notably one for potatoes. In Part 2, the impact of the energy crisis of the 1970’s on the NYMEX will be discussed along with the crude oil futures contract.

²³ “Butter and Egg Men Bar Deals in Futures: New York and Chicago Exchanges Take Steps to Prevent “Cornering” the Market. The New York Times Historical Newspaper. April 12, 1917. P. 2

²⁴ “Speculation Ended in Butter and Eggs.” The New York Times Historical Newspaper. November 16, 1917. P. 20

²⁵ “Exchange Will Vote Today on Butter and Egg Futures .” The New York Times Historical Newspaper. November 9, 1926.

²⁶ “Exchange Denies Hedging in Eggs Raises Retail Prices” The New York Times Historical Newspaper. October 1, 1926.

²⁷ “House in New Rush Passes Many Bills.” New York Times Historical Newspapers, June 4, 1935. P.9