Cboe Marks Golden Anniversary

50 Years of Exchange-Traded Options

Cboe Global Markets

First day of trading at the Chicago Board Options Exchange (Cboe), April 26, 1973.

By Howard Baker

Fifty years ago, on April 26, 1973, the Chicago Board Options Exchange (Cboe) opened its doors for business, offering investors, for the first time, standardized stock options contracts traded on a national securities exchange. These contracts, covering call options on 16 stocks, introduced the investment world to a number of innovations, including standardized terms and conditions, next-day settlement and an affiliated clearinghouse which issued and guaranteed the performance of all contracts traded.

There are two types of stock options: puts and calls. A call option entitles the holder to buy a fixed number of shares of an underlying security at a stated price on or before a fixed expiration date. A put option entitles the holder to sell a fixed number of shares of an underlying security at a stated price on or before a fixed expiration date. Options are uniquely flexible (versatile) financial instruments with a variety of uses. As instruments of risk transfer, they can be used to increase an investor's stock market exposure with limited, predetermined risk, or to reduce the financial market risk an investor might have by holding an individual stock or portfolio of stocks.

Before Cboe's launch, options trading was conducted by telephone in the over-the-counter (OTC) market through put and call brokers. Historically, the conventional OTC options market was small, so it was not surprising that many seasoned Wall Streeters were highly skeptical of Cboe's chances for survival. Further, industry conditions at the time of Cboe's debut could hardly have been worse—the stock market was down, trading volume was low and many brokerage firms were consolidating or terminating operations.

OTC options trading in the United States dates back to the late 18th century. During the roaring bull market of the 1920s, options contributed to some serious abuses in the financial markets. Public concern about the contributory role of options in a national financial collapse led to a Congressional probe and the introduction of legislation banning all options trading nationwide. In response, a vigorous lobbying effort educated legislators about the legitimate hedging functions of options successfully avoided an options ban in the Securities and Exchange Act of 1934. Instead, the law authorized the newly formed Securities and Exchange Commission (SEC) to regulate options trading and, at the SEC's urging, the Put and Call Brokers Association was formed as a self-regulatory body to oversee OTC options trading.

Cboe's Beginnings

Cboe's roots trace back to the late 1960s to the Chicago Board of Trade (CBOT), at the time the country's largest futures market primarily dealing in agricultural commodities. To mitigate the ebbs and flows in its grain trading pits, CBOT undertook an in-house effort to find a new product to trade. Ultimately, it zeroed in on the conventional OTC put and call stock options market. For the better part of the ensuing five years, CBOT doggedly pursued a plan to create a listed options market aided by a blue-ribbon advisory committee representing the financial, academic and institutional investor communities. They held numerous discussions and negotiations with regulators, including the Federal Reserve Board, the Commodity Exchange Authority (CEA), state securities commissioners and the SEC, who were concerned as to the impact a new options market might have on the integrity of the existing financial system.

Once it became clear that the SEC would be Cboe's prime regulator, CBOT's governing board, which had always been uncomfortable with the prospect of possibly having two federal regulators (the CEA and SEC) overseeing its activities, decided to spin-off both the Cboe and the Cboe Clearing Corporation as independent entities. As part of the terms of the spin-off, existing CBOT members were granted continued trading rights and privileges on the Cboe while trading and clearing memberships were authorized for sale on the new exchange and clearinghouse.

Success Brings Competition

In its initial approval order, the SEC held Cboe on a tight leash, allowing only call options trading on no more than 20 underlying stocks. Despite these limitations, trading volume soon far exceeded projections. If imitation is said to be the sincerest form of flattery, it didn't take long before Cboe had competitors to contend with as the American Stock Exchange (Amex), Philadelphia Stock Exchange, Midwest Stock Exchange and Pacific Stock Exchange all applied for, and received, SEC approval in the ensuing months to enter the listed options business. The New York Stock Exchange (NYSE) and Nasdaq remained on the sidelines for a few years before starting options trading.

Amex was the second exchange to start an options market and was prepared to create its own clearing organization. That proposal was not well-received by the brokerage firm community, which sought to avoid multiple clearing entities. They reached a resolution when Amex negotiated to buy a 50% interest in Cboe's existing clearing arm, which was then renamed The Options Clearing Corporation (OCC). As other exchanges prepared to start their options programs, each purchased an ownership interest in OCC.

The concept that a single options clearinghouse would serve as the issuer and guarantor of all listed options contracts was a crucial innovation that helped ensure the success of options trading in the United States. With OCC serving as the opposite party to all options transactions—the buyer for every options writer, and the writer for every buyer—it became possible for market participants to enter into trades without investigating the creditworthiness of the opposite party or worrying that the opposite party might default.

For buyers of exchange-listed options, the existence of a secondary market meant that those buyers could liquidate (close out) their long positions by entering a "closing sale transaction." Similarly, for option writers, the existence of a secondary market substantially increased their flexibility as they could also eliminate (close out) their contractual liability at any time prior to expiration by purchasing options with identical terms to the ones previously sold, in a "closing purchase transaction." This combination of interchangeability of options and the severance of direct links between options buyers and writers fostered the growth of an active, liquid secondary market and has been primarily responsible for the success of the listed option concept.

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Options traders in the early days of the Cboe, 1975.

Another reason often cited for the growth and popularity of exchange-listed options trading was the standardization of terms for all traded option contracts. At its core, an option covering 100 shares of a particular underlying stock has three basic characteristics: a maturity (expiration date), a strike (exercise) price and a premium (the price at which the option trades). In the OTC market, each of these characteristics can vary from contract to contract. This contrasts with the listed options framework where the maturities and strike prices are standardized, with only the premium remaining variable to reflect changes in future price movements of the underlying shares.

Having limited Cboe to listing options on not more than 20 underlying stocks, the SEC continued this practice as additional exchanges were approved for options trading. Before expanding the number of listings, exchanges had to satisfy the SEC as to their operational efficiency. The SEC also required any underlying stock considered for options trading to be either NYSE or Amex-listed.

During the 20-month period before Amex started its options program, Cboe was the only options exchange and enjoyed free reign to select any qualified underlying stock for options trading. However, once the Amex and other exchanges entered the business, it was inevitable that more than one exchange might seek to select the same underlying stock. Just that scenario occurred in 1976 when the Cboe and Amex both selected and began trading options on the common stock of MGIC Corporation. It became the first multiply-traded (dual listed) option and the start of many hotly contested trading battles among the options exchanges which increased in intensity once the SEC permitted listed options trading on popular Nasdaq and foreign stocks.

Competition among the options exchanges yielded certain beneficial changes. This included guaranteed prices for certain size orders (minimum 10 contracts), enhanced order entry systems and a general tightening (narrowing) of price quotes between bids and offers. In 1977, with four years of options trading experience limited to call options, the SEC allowed for a pilot program to introduce puts to the markets. Overall, interest in options grew each year as more retail, professional and institutional customers became attracted to the markets.

A Lawsuit and a Moratorium Threaten Growth

In late July 1983, with more than 10 years of listed options trading completed, an interesting development occurred following the Amex's announcement of its intention to commence options trading on the common stock of Golden Nugget, a popular and actively traded NYSE listed company. Ever since its 1973 approval for Cboe to start options trading, the SEC never required an options exchange to secure the consent of an underlying stock before commencing options trading. The SEC's position was that any options that would be created once trading commenced would be issued by OCC and not the underlying company. Provided an underlying stock met existing options listing criteria, the exchanges were free to trade options on that stock.

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The S&P 100 Index (OEX) options pit in 1984 (left) and the Cboe Volatility Index (VIX) options pit in 2006 (right), showing the change in technology on the Cboe trading floor.

Upon selecting a new underlying stock, Amex's practice was to send a welcome letter to each company to inform corporate management of its intention to start options trading. Immediately upon receipt of the Amex letter, the Golden Nugget CEO contacted the exchange demanding that no options trading take place on its stock. The Amex respectfully refused the demand and Golden Nugget commenced a lawsuit in Nevada federal court.

Golden Nugget's contention was not based on any violation of securities law, rather that Amex's failure to secure the company's consent before trading options on its stock constituted a misappropriation of Golden Nugget's property and that it infringed the Golden Nugget trade-name which, in essence, constituted unfair competition. For more than four years, Golden Nugget's suit against Amex and OCC wound its way through the federal courts. At the trial court level, Amex prevailed and, in September 1987, about a month before the market crash, a federal Court of Appeals rejected Golden Nugget's appeal, upholding the lower court's decision.

The increase in options activity among retail investors brought more attention to the options departments at brokerage firms. During on-site sales practice examinations, regulators noted a rise in customer options complaints and arbitration filings and the SEC was troubled by certain questionable trading activity on the trading floors that attempted to influence volume levels in multiply-traded options. These concerns led the SEC in October 1977 to declare a moratorium on any further expansion of options trading pending the findings of a broad study of the listed options markets. The SEC study lasted more than a year and concluded with the issuance of more than 80 recommendations ranging on issues of options sales practices, floor trading and surveillance, registration and licensing of sales personnel, advertising and net capital requirements, among others.

To address these recommendations, the exchanges formed an Options Task Force composed of representatives from each options exchange, the NASD and the member firm community. The Task Force proposed numerous new rules and procedures that ultimately satisfied the SEC, which lifted the moratorium in 1980 and effectively removed exchange-listed options trading as a "pilot program."

Some of the early post-moratorium actions taken by the SEC included a phase-in of puts trading so every outstanding option class had both puts and calls available; the adoption of an Allocation Plan addressing how new underlying stocks were selected and traded among the options exchanges; and consideration of several new products for trading options on interest rate securities, foreign currencies, domestic and foreign stock indices and market volatility.

A long-held concern of the SEC in allowing for the expansion of listed options trading was the need to assure that industry personnel were well informed and educated about options products. To address this, exchanges held education seminars, workshops and other instructional efforts directed at both floor trading personnel and upstairs sales representatives. Industry-wide licensing exams for registered and supervisory personnel were expanded to include options, and brokerage firms were further required to identify and qualify those personnel who oversaw customer options account approvals, as well as any other options-related businesses in which a firm might engage. And, to assist in educating individual investors about the responsible uses, benefits and risks of exchange-listed options, OCC created The Options Industry Council to provide free seminars, webinars and other materials.

Academic Curiosity

Appealing not only to investors, options have long been an attractive area for academic study. Possibly the best-known academic effort which, coincidentally, was published just prior to the time Cboe

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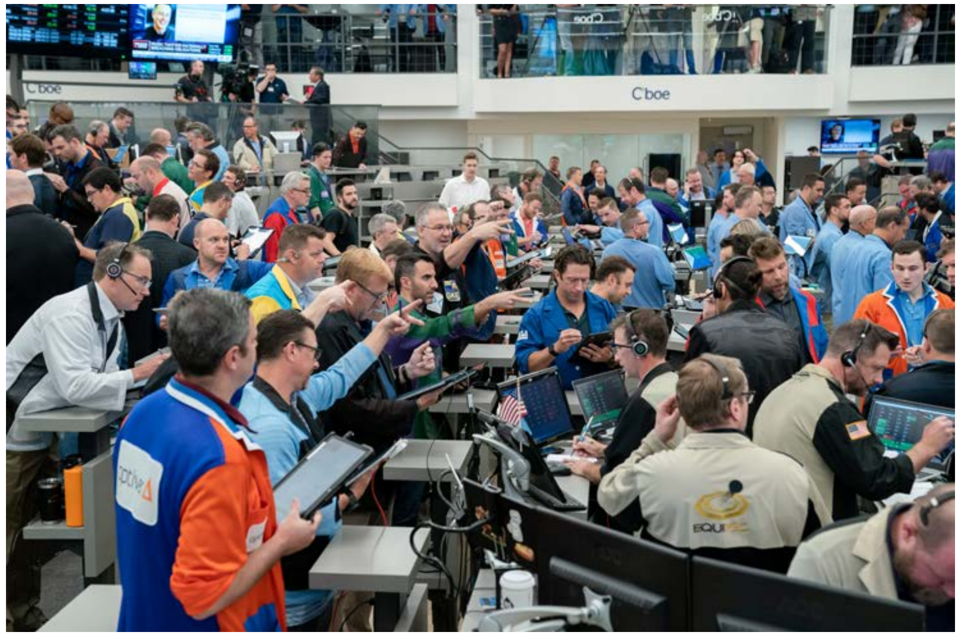
Cboe trading floor, 1995.



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Opening day on the new Cboe trading floor, June 6, 2022. Pictured here is the S&P 500 Index (SPX) options pit.

started trading, was an option pricing model by Professors Fisher Black and Myron Scholes that was later expanded through the work of Professor Robert Merton. Dan Galai, a doctoral candidate at the University of Chicago when Cboe started, was the first academic to examine the empirical validity of the Black-Scholes model using Cboe's first six months trading data. Over the years, as new options products have been introduced to investors, numerous academics have researched and addressed topics such as options pricing, market structure and market impact, while the SEC has made use of academic reports and studies in helping guide their decision making.

Change Over the Years

Over the years, in response to investor preferences, many modifications have been made to the rules and practices of the options exchanges to permit newly selected stock options to be listed at considerably narrower strike price intervals and more expiration months. In addition, in response to investor requests for longer dated expirations following the market crash in 1987, Long-Term Equity Anticipation Securities (LEAPS) were created with expirations approaching three years.

As both retail and professional stock investors became more comfortable with low-cost passive investing strategies, options exchanges added index options and Exchange Traded Funds (ETF) to their mix of tradable products. Some exchanges created their own broad market and sector indexes, while others sought license agreements from well-known index providers such as Dow Jones and Standard and Poor's. Since index options were designed to settle in cash upon exercise, rather than by stock settlement, new rules and procedures needed to be adopted to accommodate this feature. Also, most index options were designed with a "European exercise" feature which limits exercise to at or near a contract's expiration.

The introduction of numerous new products has resulted in the current listing of nearly 6,000 underlying stocks and exchange traded funds resulting in more than 1.4 million options series available for trading. In addition, institutional customers who meet certain standards can trade Flexible Options (FLEX), where the terms of those contracts can be customized.

The model of a separate but affiliated marketplace and clearinghouse that Cboe pioneered 50 years ago has been adopted by numerous exchanges across the globe. The success of the US listed options market continues to attract new investors who have become aware of, and comfortable with, the uses (and risks) that options provide. It's highly doubtful that even the most optimistic Cboe supporter could have ever thought its opening day trading volume of 911 contracts would grow to average 13.6 million contracts a day in 2022. $

Howard A. Baker is a member of the Editorial Advisory Board of Financial History *magazine and former head of the Options Division of the American Stock Exchange.*

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