THE ADVENT OF THE CHICAGO BOARD OPTIONS EXCHANGE
A GOLDEN ANNIVERSARY MEMOIR BY ITS FOUNDING PRESIDENT

By Joe Sullivan

April 26, 1973, was a momentous day in the history of the world's financial markets. It marked the opening day of trading on the Chicago Board Options Exchange and with it the advent of what was probably the most important stock market innovation of the 20th Century.

For those of us who had assembled for the opening ceremony, it was anything but clear what the CBOE's destiny would be. The ceremony took place in what until a few months prior had been a musty smoking room adjoining the Chicago Board of Trade's huge commodity futures trading floor. But now the room was rimmed by eight booth-like trading posts topped by big CRT screens that would display the prices of financial instruments the likes of which the world had never seen before.

The governor of Illinois Dan Walker and the chairman of the Securities and Exchange Commission Brad Cook were on hand for the occasion and lent it stature. But Walker later landed in prison while Cook soon resigned his post in disgrace. No one could say for sure that the CBOE wouldn't face a similar fate.

For my own part, I was mainly just elated that this day had finally come. As a former journalist with little background for the role until I stepped into it, I'd devoted more than four years to spearheading what at times had seemed like a windmill tilting exercise. How I came to be part of this effort, how it came to fruition and how it achieved almost instant success are what this memoir is all about.

My Career Change

After graduating from Princeton in 1959 and getting my masters degree in journalism from Columbia in 1960, I spent more than seven years as a reporter for the *Wall Street Journal*, mostly in Washington. I primarily covered Congress, and those were heady years to do so. The landmark 1964 Civil Rights Act and the commencement of President Lyndon Johnson's War on Poverty loomed large in the early going. Johnson's landslide victory in the 1964 election swept in huge Democrat majorities in Congress and set the stage for an outpouring of Great Society legislation over the next two years. That 89th Congress was one of the most prolific of the 20th century, and I was privileged to observe and write about many of its accomplishments.

Right after the 1966 election I wrote a lead article predicting that Republican gains would preclude any furtherance of these measures but wouldn't be sufficient to repeal them. That prediction proved correct. Congress became gridlocked, and I grew restless for lack of much to cover. Moreover, I'd come to realize that I didn't have the perspicacity to become the next Walter Lippmann.

The White House's legislative liaison Henry Wilson had left to become president of the Chicago Board of Trade, and when he asked me to become his assistant I was receptive. I didn't know a lot about the Board of Trade but getting involved in the workings of financial markets held appeal as did the prospect of doubling my pay. So after making some soundings I accepted.

When I got to Chicago in January 1968, I didn't have a very clear idea what I would be doing. So I tried to steep myself in the workings of the commodity futures markets and developed a rapport with some of the intriguing traders who served on the board of directors.

The Board of Trade's grain futures markets, which had been its staple for a century, were in the doldrums at the time. They depended on price volatility to flourish, but wheat, corn and soybean prices were caught between government price supports that propped them up and big resultant surpluses that held them down. The Board's emphasis was on diversification, and one of my first projects was to assess the feasibility of a market in plywood futures. This took a lot of digging, and while the resultant futures market never amounted to much, the powers that be were impressed by my quick grasp of the conventions of the plywood industry and how to fit them into a futures contract framework.

Another diversification idea that was hatching at the time was to somehow get in on the action in the stock market which was booming. The first choice of many was to launch a futures contract on the Dow Jones Average which could have been a winner but seemed precluded by federal regulatory constraints and perhaps state gambling laws.

The futures markets were predicated on high leverage which is to say that only a small portion of the contract price had to be posted as margin. But low margin requirements in the stock market in the 1920s had been widely blamed as a major cause of the Great Crash that led to the Great Depression. So the Federal Reserve Board had been mandated to set margin requirements for securities which at the 50 percent level that has prevailed for many years were prohibitive for futures. *(Note: In 1982 the Commodity Futures Trading Commission cleared the way for cash-settled futures on the S & P 500 index.)*

However, there was one way to get highly leveraged participation in the stock market without incurring margin requirements. That was to buy options (known as puts and calls) on a stock. The purchase price, known as the premium, for an option had to be paid in full. But the holder of a call option gained unlimited appreciation potential in a stock without any downside risk beyond the premium.

When the Board of Trade began exploring them in the fall of 1968, activity in these instruments was minimal. A prime reason was that no two option contracts had the same terms, and the only way a call option holder could realize a profit was to exercise it and buy the stock at what was known as its striking price. But if large numbers of option contracts could be made identical then it might become possible to conduct a market in the premiums where holders could trade them at prices reflecting movements in the underlying stock just as was the case with futures. The key word was to make the options *fungible* by standardizing their terms and, just as critically, establishing a clearing house that would stand behind all of them, which was another bulwark of the futures markets.

To evaluate the options market concept the Board of Trade established a committee chaired initially by the man who would become its chairman in 1969, a charismatic floor trader named Bill Mallers. The biggest proponent was another floor trader, Ed O'Connor, and the committee also included the Chicago representatives of several of the big stock brokerage firms of the time of whom the most memorable was Art Marcus, then of E.F. Hutton. I was named the sole staff support person to the committee and initially was skeptical about the feasibility or even the desirability of such an undertaking.

Then Art Marcus brought to a committee meeting a fresh study by two Princeton economics professors, Burton Malkiel and Richard Quandt. It propounded that options could be valuable tools for institutional investors such as pension and endowment funds. In order to make options meaningful to them, though, a much larger scale market needed to be developed, perhaps one patterned after the futures markets. Presto, I became a convert.

In January, 1969, Henry Wilson, Bill Mallers and I went to Washington to broach the subject of starting such a market with the Securities and Exchange Commission which had sweeping statutory authority over stock options but had paid scant attention to that tiny market. Henry had been hired to be a power lobbyist, and he was able to summon the SEC's Chairman Manny Cohen to a lunch meeting at the Democratic Club. Cohen was accompanied by the crusty director of the SEC's Division of Market Regulation Irving Pollack.

By that time, Richard Nixon was on the verge of taking office, which meant that Cohen was on his way out as chairman. So the careerist Pollack did most of the talking. When I was called upon to present our still embryonic concept for an options market, Pollack told us in no uncertain terms that there were "insurmountable obstacles." A prime one stemmed from the fact that for every option buyer there had to be a seller. The sellers were known as writers, and Pollack insisted they would be issuing new securities and therefore subject to SEC registration requirements that included furnishing a prospectus to the buyers.

That would indeed have been a show stopper. When we demurred, saying that there were no such requirements in the existing options market, he responded that they had in effect been waived because the market was so small, but that if options ever gained prominence they would have to be enforced. His legalistic comments were interspersed with swipes at options as being little more than gambling and at an exchange for them as little more than a casino. He even likened options to thalidomide, a drug that had caused birth defects. “Don’t waste another nickel on it,” he admonished.

To give Pollack his due, options did have an unsavory history of association with stock manipulations in the 1920s by what had been known as pool operators of whom Joseph P. Kennedy was the best known. Indeed, the SEC had been formed in no small part to put a halt to them with none other than Kennedy at its helm. By 1968, the Commission had long since put the clamps on such manipulations, to which options were never more than peripheral. So trying to tar options with that brush, as Pollack also did, was strictly guilt by association.

Henry Wilson was never one to be easily deterred, and for my own part, all that meeting did was create a resolve to somehow prove Pollack wrong. I remain eternally grateful to the Board of Trade for continuing to support the undertaking and for looking to me, a relative novice, to spearhead the effort.

The Creation

The two members with whom I worked most closely in that early going were Ed O’Connor and another astute grain trader, Paul McGuire. O’Connor was the son of a Chicago cop, devoid of pretense and with nerves of steel that enabled him to carry huge speculative positions without any sign of trepidation. McGuire was an erudite man with a masters degree from Harvard in public administration. He had held State Department postings in Egypt, Greece and Turkey before getting frustrated with the department’s bureaucratic ways and opting for the individualism of the Board of Trade where he had worked as a clerk during summer vacations while he was in college.

Initially we addressed the standardization of option terms, drawing also upon Malkiel and Quandt as consultants. Our twofold invention was (1) to have all options on any given stock expire at the same time quarterly and (2) to set standard striking prices for these options—at five point intervals for lower priced stocks and ten point intervals for higher priced ones or even 20 point intervals for high flyers like IBM was at the time. Then you could have a market in July 220 IBM options akin to July wheat or corn.

Originally, it was supposed that the options market could be conducted in just another pit on the Board's humongous trading floor. However, it soon became apparent that this couldn't be the case. Options were securities and dealing in them would subject the Board of Trade and its members to SEC regulation. The big players in the more loosely regulated commodities markets wanted no part of that. So a separate new securities exchange would have to be established for the options, adding another dimension to the challenge.

By now, I was aware that the Board of Trade was a highly politicized place with many factions. The two basic ones were known as the commercials and the locals. The commercials consisted of the big grain firms and feed processors who used the futures markets for hedging purposes. The locals were the independent traders and brokers who populated the trading floor. Then there were the brokerage houses, which handled orders for both hedgers and speculators around the globe. And there were factions within factions.

The commercials had no use for a stock options market, but the locals and brokerages were ascendant at that point, and they were hungry for more business. Even so, if the membership as a whole had realized how long it would take and how much it would cost to give birth to the new market its formation would in all probability have been aborted, as it nearly was on more than one occasion.

That four year gestation period marked the most exhilarating and momentous years of my life. I thrived on each new challenge and would write "white papers" describing our handiwork. As the challenges mounted so did my responsibilities. In late 1969 I was named the Board's vice president for planning and market development, and I began to build a staff. My first hire was an administrative assistant Barbara Kaplan who joined me upon graduation from Northwestern in 1969. Her forte became arranging meetings and special events, and we had a lot of those. In early 1970, Joe Doherty, who was a Harvard Business School MBA and aspiring trader, sought out a role upon completion of a military hitch. Later that year we added a very bright young man named Wayne Luthringshausen who had been working as a margin clerk for a brokerage firm in New Orleans while putting himself through college at night. Others would follow in the year ahead.

Joe D, as he became known worked primarily on the market structure for conducting trading under the tutelage of another illustrious member of our oversight committee, Corky Eisen. The fact that we were destined to become a brand new exchange afforded opportunities for innovation without infringing on vested interests, and our innovations remain a great source of pride. The prime ones were to separate the broker and dealer functions that were combined on the floors of both stock and commodity exchanges and to foster competition. On the New York Stock Exchange a unitary specialist served as both the franchised dealer and custodian of customer orders. The SEC had long been critical of this monopolistic position and its perceived conflicts of interest, and we wanted no part of it. Corky believed that even the more limited way in which floor members on the Board of Trade could deal for their own account while at the same time holding customer orders also posed a conflict. So the options market would have a competing dealer system with the agency function of holding resting orders vested in an exchange designee we called the Board Broker. This broker could only represent public investor orders which would have absolute priority at any given price, something no other exchange afforded. Establishing all the ground rules for all this innovation was no small order. Joe D recalls they went through at least six iterations.

With another steering committee, Wayne was responsible for working on the clearing. This meant not just processing transactions but, most critically, securing their fulfillment. As with futures clearing, an options clearing entity became the obligor on every contract and had to have underpinnings that would withstand every kind of financial stress. One of them, carried over from futures, was one day settlement. This meant every transaction had to be paid for and every open position secured before the market opening on the following day. The stock market at that time had five day settlement, and Wall Street had nearly choked to death in the late 1960s because of operational overloads associated with its archaic procedures. “When we told the New Yorkers we had one day settlement, they looked at us like we were from Mars,” Corky Eisen would later recall.

That left me to concentrate on what I’ll call foreign relations: mainly in New York and Washington. I began beating a path to Wall Street to try to build interest in our concept among the various sectors of the securities industry that were centered there. There were the “wire houses” that mainly served individual investors as well as the institutionally oriented brokers who were having a heyday at that time, the big investment banks and the coterie of tiny firms that comprised the Put and Call Brokers and Dealers Association.

For the most part, if I could get an audience at all, I was met with lack of interest or skepticism. None of the put and call firms wanted any part of it, not because they were opposed or fearful but because they didn’t comprehend our concept (which may have partly been a failure of communication on my part) and didn’t believe it would ever see the light of day. The Wall Street community at large also generally believed the market would never be approved by the SEC and wouldn’t work even it was. After all, what did a bunch of grain traders from Chicago know about the securities market?

But there were some notable exceptions. A prestigious institutional brokerage firm--Donaldson, Lufkin and Jenrette-- had an options wizard who more or less ran his own boutique within the firm. His name was Leo Pomerance, and he took me under his wing. Leo was the dean of a loose-knit organization known as AMFOD, which stood for Association of Member Firm Options Departments. He hosted some small gatherings, usually at Delmonico’s restaurant, that gained us a measure of interest and involvement from its ranks including Ken DeWitt of Merrill Lynch, Les Pihlblad of Pershing and a youngster from the middling sized firm of Model Roland. His name: Bill Brodsky.

The other New Yorker who played the largest role was a brilliant young arbitrage partner named Bob Rubin at what was then as now Wall Street's premier investment bank, Goldman Sachs. He would go on to become the firm's managing partner and then Secretary of the Treasury. Our proposed market, if it took hold, would afford limitless possibilities for arbitrage. Bob was quick to recognize them and backed us to the hilt.

Through it all, Joe D and I believed that if we could get the market up and running it could become very big. One reason was that we tracked the activity in warrants to buy the stock of major companies that were, for their duration, concurrently traded on the New York Stock Exchange. When their exercise price was within striking distance, so to speak, of the underlying stock price, trading activity in the warrants would often exceed activity in the stock. Indeed, on many days, activity in an AT&T warrant that was approaching expiration topped the NYSE's most active list. But the companies that issued them had created the supply of warrants whereas the supply of options would have to come from writers, and would there be enough of them? Bob Rubin assured me that if there was demand there would be supply aplenty.

At times, though, I privately doubted that our options' day would ever come. Sometimes, as I was flying home to Chicago after a discouraging day in New York I would sing to myself some lyrics that I had coined to the melody of a Frank Sinatra song *Call Me Irresponsible,* and my lyrics went like this:

"They said it was impossible, the obstacles insurmountable, crazy and unworkable too; but then one day the impossible came true."

The biggest obstacle, of course, was getting SEC approval, and we knew we needed a top notch navigator to stand a chance of getting through it. Fortunately, we were blessed to have a man widely considered the preeminent securities lawyer in the country whose office was right across the street from the Board of Trade. His name was Milton Cohen (no relation to Manny), and he was highly regarded at the SEC as well as in financial market circles. Indeed, he'd started his career at the SEC in the 1930s, and in the early 1960s he had taken a leave of absence from his private practice to serve as the director of an SEC sponsored, much acclaimed Special Study of the Securities Markets.

Milton was initially wary of our undertaking but agreed to serve on an advisory committee of luminaries we had formed to oversee a study of its legitimacy by a Washington-based consulting firm, Robert Nathan and Associates.. Other members of that committee included a paragon of institutional investors Roger Murray who headed TIAA-CREF and Jim Lorie who was associate dean of the University of

Chicago Business School and the head of its renowned Center for Securities Price Research. Malkiel and Quandt also contributed.

The Nathan Study concluded that the use of options could benefit investors in a wide variety of ways including valuable redistribution and refinement of the risks and rewards of their stock holdings. With the study's affirmative set of findings, Milton warmed to what we were about and agreed to take us on as a client. Every one of my white papers was subjected to scrutiny as to how it would comport with applicable securities law or need revision. As our relationship evolved I came to regard Milton as almost a second father.

Our formative process led to numerous submissions to the SEC that were greeted by Pollack and his staff with many more questions than answers. It seemed as if this process could go on indefinitely—which may well have been what Pollack had in mind. I kept a stack of all these submissions and responses, and it grew to more than two feet tall. I must say, though, that his two deputies who were most involved, Sheldon Rappaport and Martin Moskowitz, were always gracious, and I have fond memories of them.

On one account, we really did provide a solution to Pollack's "insurmountable obstacle" problem. Milton's sage colleague Burt Rissman devised that the Options Clearing Corp. would serve as the issuer and registrant of the securities and would furnish a prospectus to option buyers. That still left sticky questions as to what the prospectus should contain, but it was a major milestone.

For the first two years of the Nixon Administration the SEC had more or less of a caretaker chairman who pretty much deferred to its old guard staff. But 1971 brought a dramatic change when Nixon named dynamic New York lawyer Bill Casey to the chairmanship. Casey viewed the post as a stepping stone to the job he really coveted (and eventually got) which was director of the CIA. But he brought a fresh, much more free market oriented approach, and he treated Milton as a valued advisor on many matters. Instead of asking "Why?" about the options market, Casey began to ask "Why not?"

The Green Light Letter

That summer Milton privately presented him with a proposal. The market should be allowed to proceed as a pilot offering call options only on 16 stocks and would be subject to a panoply of safeguards. On October 14, 1971, we received a letter from Pollack that was a masterpiece of regulatory double negatives. It stated that, "Based on the material presented to date, the Commission finds that in principle the proposed options exchange does not appear to be inconsistent with relevant statutory requirements and standards. Eventual approval would, of course, be contingent upon a Commission finding that adequate regulatory standards for the protection of investors are developed and implemented."

The Board of Trade's Chairman Owen Nichols, Henry Wilson and I had assembled with Milton Cohen and his associate Mike Meyer to receive the letter which had been addressed to Milton. After reading it with perplexity, the dapper English accented Nichols asked, "What on earth does that mean?" To which Milton responded, "It means we can go ahead."

The letter came just in the nick of time because the Board of Trade was on the verge of cutting off all funding to the project. Ascendance on the board had swung back toward the commercials and even many locals had come to view it, in Vietnam parlance of that era, as an endless tunnel. Even with the Pollack "green light" letter direct funding would cease at yearend. But the Board agreed to guarantee up to a million dollar line of credit to the separate options exchange that would have to be formed. Repayment would come, ever so hopefully, from the sale of memberships to those who wanted to participate.

Gearing Up

We then set to work on everything needed to make our dream become a reality.

In addition to organizing and staffing a new exchange, the tasks included adopting a Rulebook to govern its operation, satisfying other SEC registration requirements, designing and building the facilities in which trading would be conducted and ever so crucially selling a critical mass of people on participation. There were several key additions to our staff at this point.

Gary Knight was a dynamo of a guy who was then an OTC stock trader but wanted to trade options. I knew from the moment I met him that he was the right guy to head up our sales efforts. He could talk the trader's talk and could also charm the socks off almost anyone of any gender. I don't begin to know how he accomplished everything he did, but I do know a lot more brokerage firms and individual traders became interested in our still putative market.

Jim Hoff came aboard from a faculty position at Cal Poly San Luis Obispo. Jim was a polio victim whose every step on a heavily braced withered leg bespoke his fortitude. It soon became clear to Jim that the task of setting up our trading facilities in what had been a 4,000 square foot smoking room adjacent to the Board's huge trading floor was too much for him alone to oversee. So at his insistence and selection we retained Jerry Tellefsen of Booz Allen as a nearly full time consultant, and he became part of our family.

Other staffing, such as a compliance department to oversee fulfillment of our self-regulatory responsibilities and another to manage floor operations would have to wait until we were closer to the starting line. Also, it was becoming increasingly clear to me that managing all of this was too big a job for me and that we would need a chief operating officer. Meanwhile, Wayne was hard at work setting up the clearing house which would be domiciled in a separate entity, as was the case on the Board of Trade. Fortunately, its able Executive Vice President Bob Burmeister was allowed to continue overseeing our finances on a pro bono basis.

A stumbling block in our organizational planning was the basis on which Board of Trade members would be allowed to participate. A school of thought had developed during our dark years in the tunnel that those who wanted to do so should pay for the privilege and reimburse those who didn't for the start up costs. But when the day of reckoning arrived, Bill Mallers, who had faded from the limelight after his term as chairman, resurfaced to insist that the purpose of the undertaking had been to provide trading opportunities for all members whether or not they chose to use them at any given time. So we ended up providing that every Board of Trade membership would carry with it a perpetual right to participate at nominal entry cost. That seemed like the right thing to do at the time, but it came back to haunt the new exchange in later years until its directors managed to buy out these rights.

On February 8, 1972, what was awkwardly christened the Chicago Board Options Exchange formally came into being, and I was named its president, another memorable day for me. It soon became known by its CBOE acronym (and its very name has recently been changed to the streamlined Cboe). We had an initial 15 person board of directors of which I was very proud. Leo Pomerance was chairman and Ed O'Connor vice chairman, giving us a foot in both the New York and Chicago camps. Other directors included Corky Eisen, Art Marcus, Paul McGuire, Bob Rubin, Owen Nichols and Pat Hennessy, another Board of Trade member who had played a pivotal role. We also had three illustrious public directors: Jim Lorie, Roger Murray and the former governor of Illinois Richard Ogilvie, who I had also sought out.

It took a full year and more to get from organizational to launch date on April 26, 1973. By then, veteran NASD administrator Bruce Simpson had joined us as executive vice president and brought Jim Brucki with him as director of compliance. Don Dueweke became the able head of floor operations.

A Motley Opening

The 16 initial stocks were picked from the NYSE's most widely held, actively traded list with an emphasis on diversification. At that time there was what were known as the Nifty Fifty, and most of our stocks came from it. Paul McGuire, who was a multifaceted investor, oversaw the selections.

When it came time to pick the Board Brokers, we only had seven applicants for the eight posts (two stocks per post) who had any experience handling orders on the floor of any exchange be it stocks or commodities. We did have other applicants, and a young accountant impressed us the most. So we went with him. By then, the Board of Trade's futures markets were flourishing once again, and we had very little participation from its floor members. Our market makers were a motley bunch. Many were rookies, and if the others had been prospering elsewhere they probably wouldn't have ventured into the unknown. To hear Corky Eisen tell it, he and Ed O'Connor were the only veterans, and they moved from post to post shoring up the ranks. The post at which McDonald's traded was located immediately adjacent to the Board of Trade floor, and during midday grain trading lulls some would meander over to do some options trading. They became known as the McDonald's lunch bunch.

We traded 911 contracts that opening day at posts that ringed the renovated smoking room that was our trading floor, with large overhead screens displaying prices. It seemed like a lot at the time, and we could barely imagine the exponential growth that lay ahead.

I had thought that the CBOE would provide a boost to the OTC put and call market by giving options more visibility and given the fact that it had the entire universe of stocks to draw upon whereas we only had 16. As it turned out, though, the OTC market withered away, bringing another set of valuable players to our floor. We had truly built a better mousetrap.

A pure coincidence that contributed mightily to our success was the publication in early 1973 of what became known as the Black-Scholes options pricing model. As formulated by two economics professors at MIT's Sloan School, Fischer Black and Myron Scholes, it hadn't been devised with stock options specifically in mind. But Black-Scholes was extremely well suited to pricing them and, equally important, hedging options positions based on what were known as their deltas. In the CBOE's early days, many market makers would carry spread sheets that priced the options they were trading and their hedge ratios across a range of underlying stock prices. Those who adhered to Black-Scholes generally fared better than those who didn't. In 1997 the two men, along with a colleague Robert Merton, were awarded the Nobel Prize in economics for their work.

We were also blessed by a cultural change toward a more free market orientation at the SEC. When Bill Casey was named chairman in 1971, he prevailed upon a young lawyer from New York named Lee Pickard to become his assistant. By 1973, Pickard had replaced Pollack as director of the Division of Market Regulation. Many years later Pickard would reflect, "I was not a regulatory type. Someone once said to me 'Lee, you're sitting in that chair as director, but you're not a firm believer in regulation.' I said, 'That's true, all the more reason for me to be here.'"

Enormous Growth and Competition

With the addition of 16 more stocks in two stages later on that year, trading volume grew to an average of more than 10,000 contracts a day by yearend. Even though there wasn't post space for any more stocks on what was becoming a very cramped trading floor, volume doubled once again by the end of our June 30, 1974, fiscal year with peak days exceeding 30,000 contracts traded. By then, we had sold 346 memberships at prices ranging from $10,000 to $20,000 with proceeds of $3,787,500 that permitted repayment of our startup loan and provided the capital needed to make space for our expansion.

To the Board of Trade's great credit, it agreed to double deck its monumental, six story high trading floor. Pat Hennessy, who was an influential Board of Trade director, had a lot to do with getting that approval and worked closely with a man we knew as the Godfather who oversaw the project, Tom Imperatore of Cushman & Wakefield. The plans initially called for supporting the new deck with pillars. As Hennessy would later recall, "I said, Tom, you and I will get run out of town if we do that. We can't have pillars blocking the view of the corn pit."

Erection of the 20,000 square foot clear span deck that emerged was a construction marvel. The girders to support it were put in place at night and on weekends without a moment's interruption of trading on the floor below. The CBOE bore the bulk of the $2.5 million cost in the form of prepayments on a 10 year lease. But the new facility wasn't due to be completed and equipped for trading until December 1974.

Meanwhile, competition was staring us in the face. Imitation is the sincerest form of flattery, and within a few months after our opening the American and the Philadelphia stock exchanges declared their intent to start options markets patterned after ours. The one exception was that they would stick with their specialist system to conduct the trading without affording public orders priority as we did.

By then, most of the big wire houses, as the firms that catered primarily to individual investors were known, had established order handling and clearing capabilities on the CBOE and didn't necessarily welcome new entrants. But they were nearly all headquartered in New York, and their managements mostly retained a Wall Street centric view of the securities world. So the Amex where they also had a presence and which could draw upon these allegiances represented a formidable prospective competitor.

At the same time, though, the big brokerage houses were dead set against having to incur the costs and hassles of having to deal with multiple clearing entities. More in response to industry pressures than regulatory concerns, or so we perceived, the SEC decreed that the start of options trading on any other exchange or any further expansion of listings on the CBOE's part would be subject to provisions for common clearing and price reporting. I was at first outraged by this edict which I and others believed was an overreach of the SEC's authority. A great deal of innovative work had gone into the creation of the CBOE Clearing Corp. which remained a wholly owned subsidiary of the exchange. The practical effect of the SEC's edict would be to take our invention and make it available to our competitors.

Yet to resist would have cost us a great deal of industry good will. And as Wayne persuasively argued, if the Amex established an options clearing entity of its own it would exert a strong gravitational pull toward New York that could cost Chicago dearly in the long run. So we opted to comply and entered into negotiations on the terms of clearing consolidation.

In some respects, to be sure, this embargo was a blessing in disguise. The CBOE wasn't in a position to add more stocks until its new trading floor was ready. While there were lots of other stocks that were ripe for options trading, if another exchange could get a head start in claiming the choice ones it would probably gain what was called a primary market designation by the brokerage firms that governed the routing of their orders. In other words, whoever got there firstest would likely get the mostest. So I was in no hurry to complete the clearing negotiations and was even accused of stalling.

As it turned out, common clearing arrangements were completed by yearend, and the Options Clearing Corp. has remained Chicago based to this day. With the green light to expand, the CBOE added options on 35 more stocks during the first half of 1975, bringing the total by fiscal year end to 67. Daily trading volume was now averaging some 50,000 contracts, with peak days approaching 100,000. There were some days when options volume on some stocks exceeded activity in the underlying stock. The dollar value of options traded that fiscal year exceeded $4.4 billion up from $917 million the year before.

Meanwhile, the Amex opened in January 1975 and brought on 40 stocks during the year, none of them overlapping. Its average daily volume by yearend was some 17,000. I didn't begrudge Amex its success because I believed it would help cement the future of options trading. The Philadelphia exchange was never much of a factor. Nor were the Pacific and Midwest stock exchanges which also subsequently got into options trading.

At the same time, the CBOE's expansion brought a burgeoning of its membership. During the 1975 fiscal year, the exchange sold 450 new seats in three stages at prices ranging from $20,000 to $30,000, yielding over $10 million in working capital. By that yearend, the total membership stood at 1025 including 173 who had exercised their Board of Trade rights.

CBOE staffing also doubled during that year from 96 to 193. Most of the additions came on the floor for price reporting. But there were also big increases in membership application processing, auditing and surveillance capabilities. Likewise, exchange revenues more than doubled during the year to $5.7 million not counting membership sales proceeds, and we were solidly in the black. Needless to say, this proliferation of options activity raised questions about what impact it might be having on the stock market. Initially, these tended to focus on possible price effects on underlying stocks especially at options expiration dates when positions were unwound (only a very small percentage was exercised). Whether a given stock price went up or down, some pundit or journalist, especially syndicated columnist Eliot Janeway, would ascribe its movement to some nefarious but unknown options effect.

To combat this we once again retained Robert Nathan Associates to conduct a study, employing a variety of metrics. This Nathan study found that options had no discernable effects on underlying stock price behavior or activity-or on the stock market as a whole during the CBOE's first year of operation. But as the market continued to grow dramatically, questions persisted and were even magnified. Not only directional price effects but also possible increases in underlying stock price volatility, diversion from stock activity or even from capital formation were all posited.

Our own research department, ably headed by an expatriate from the New York Stock Exchange Tom Rzepski found no evidence of any of the above. Nor did any other responsible study that I'm aware of. To the contrary, there was a growing body of academic literature, spurred in part by Black and Scholes' work, supporting the proposition that options were contributing to overall equity market efficiency. In furtherance of our efforts to dispel forebodings about our big bang of a creation, Bob Rubin and I sought out Goldman's managing partner John Whitehead. His advice: "Give it five years."

Rzepski was just one of many key additions to top staff during those first two years of CBOE's existence. Joe Doherty and Gary Knight had left to become market makers when the exchange opened, but Joe D was soon elected to the board of directors and remained an invaluable help to me. To succeed Gary, Merrill Lynch's director of institutional options sales support Jim Dalton came aboard as senior vice president for marketing. Jim was a very different breed, serious minded and demanding. But he built the best marketing team assembled at any exchange in that era if not ever. His first lieutenant Ivers Riley was a salt of the earth type who complemented Dalton's sometimes prickly personality. Along with being a great marketeer, Ivers was also a great project manager who took the helm of efforts to extend trading to put options which came along later and earned him the moniker "Mr. Puts." Dan Skelton was also a valuable member of that team, and all three of them would loom large in my later life. Yet another addition was a first rate systems guy Dick Cowles as senior vice president in charge of the effort to bring the CBOE something we knew was sorely needed: namely, more automation.

For all of our success, there were a lot of hiccups along the way. The CBOE's support systems and those of its member firms were at times strained to the point where it looked as if we might have to suspend trading. Our initial price reporting system had been designed with peak days of 10,000 contracts in mind, and it took until May 1975 to get a new one in place that could keep up with the much higher volume. Also, there were a few bad actors among our members whom we had to discipline. To Wayne and his team's credit, the Options Clearing Corp. almost never missed a beat.

In July 1975 I was treated to a surprise gala dinner in my honor in the ballroom of the Hyatt Regency Hotel. They even brought in a country music group from my native Tennessee to serenade me. I felt on top of the world, but I wasn't destined to stay there for much longer.

Divergence and Disputation

Like other exchanges at that time, the CBOE was a membership organization whose members elected its board of directors and thus had ultimate sway over its governance. At the same time, its officers had self regulatory responsibilities under the Securities Exchange Act that included investigation and discipline of its members for rules violations under SEC oversight. Moreover, the CBOE was in a rapidly evolving line of business that was getting increasingly competitive, which meant it had to be well run as an enterprise. Reconciling all of this was never easy, but it would get increasingly difficult as time went on.

The huge influx of members during 1975 was needed to support the CBOE's rampant growth. But the competing market maker system, which was a source of strength, also meant that the preponderance of new members were individual traders (and to a lesser extent floor brokers). These traders were an individualistic bunch, headstrong, crafty and by no means content to be cogs in a machine.

They all wanted the exchange to prosper, but they were foremostly concerned with their own prosperity. And their perceived interests and those of the exchange were by no means always aligned. Three issues that came to the fore during 1976 illustrate the dichotomy.

One was the issuance of additional memberships. We already had almost as many members as any other exchange, not even counting all the Board of Trade rights holders. Still, Ed O'Connor who remained our Vice Chairman and a prime mover was convinced we needed more. I felt enormous allegiance and veneration for this wonderful man who had a lot to do with putting me in charge of the CBOE's formation and with keeping the formative process from being halted. Ed remained a highly successful grain trader, though you would never know it from his unassuming manner, but he was also an opportunist.. When the CBOE opened, he started what became its largest market maker clearing firm, and more market makers meant more customers for his firm First Options. Existing market makers, especially fledgling ones, felt there was already plenty of competition. So when at

Ed's behest we proposed the creation of 200 additional seats there was a lot of protest. A compromise was reached under which the issuance of 100 of them would be held in abeyance until the start of trading in puts which was a year away. But the altercation left considerable scar tissue.

Another heated issue was the extent to which order handling on the exchange should be automated. Dick Cowles and his team were developing a system we called Autobook which would electronically route public customer orders from member firms to the Board Brokers. But market makers mostly wanted to have a crack at that order flow en route, and independent floor brokers were also fearful that it could cut into their business. The biggest fear of all was that Autobook could lead to automated trading which was anathema to traders of that era. I can still hear the head of an increasingly vociferous Market Maker Association proclaiming, "There's not going to be any automated trading on the CBOE." In the long run he was proven wrong, but in the short run relations became more strained.

Then there was a big flap over what was known as tape racing. Quite a number of our market makers felt they were being picked off by big trading firms that had a presence on our floor as well as the floor of the New York Stock Exchange. Allegedly, these firms could relay option orders based on stock price changes faster than these changes were being publicly disseminated by the NYSE. The finger pointers demanded adoption of a rule barring this nefarious practice while the big trading firms insisted such a rule would infringe upon their bona fide arbitrage activities. The CBOE proposed a rule that attempted to resolve the schism, but its fine lines would have been very difficult to enforce, and even the SEC didn't like it. The obvious solution was to get the NYSE to speed up its price reporting. And on July 7, 1976, the *New York Times* reported:

"*The New York Stock Exchange, acting on a complaint from the Chicago Board Options Exchange, has closed a highly profitable loophole that enabled a handful of stockbrokers with good contacts on the Big Board trading floor to make substantial profits in IBM stock…. The loophole, called tape racing, enabled floor brokers and traders to relay to associates price quotations that were in their possession for up to two minutes before they became public….To solve the problem, the Big Board last week moved an optical scanning machine at the IBM trading post from one spot to another, thus reducing the time it takes to print a transaction in IBM stock on the ticker tape from about two minutes to only 15 seconds.*"

Thank goodness, that was the end of that.

Meanwhile, in January 1976 a furious stock market rally spurred CBOE activity to a peak of 123,000 contracts a day. But it also knocked the props out from under a number of market makers who got caught on the wrong side of it. That beget a lot of handwringing on the part of some of the same big New York based trading firms that had been the subject of our finger pointing. Were the CBOE's market makers adequately capitalized? Should those who were impaired by losses be allowed to continue trading? And were the underpinnings of the entire system sound?

These underpinnings were the same ones that had stood the Board of Trade in good stead for a century. A handful of well capitalized firms that specialized in clearing for floor traders in effect guaranteed their customers and were, in turn, subject to financial scrutiny by the Clearing Corp. These clearing firms were themselves astute risk managers and best qualified to determine when to cut off a failing trader. On peak days, though, there was a problem with what were known as outtrades, trades that failed to clear for lack of a matching counterparty. This was especially troubling to the market maker clearing firms in keeping tabs on their traders' positions. One of these days was the only time I ever saw the usually unflappable head of one such firm, Dave Goldberg, lose his cool. As all hands doubled down on the outtrade reconciliation process we managed to lick the problem.

In another effort to allay purported concerns, Ed O'Connor, Wayne Luthringshausen and I went to New York to meet with an assemblage of trading moguls. When Ed was asked if traders with deficits should be permitted to continue, he responded, "After four years on the Board of Trade I was a debit." His stature had extended to Wall Street by now, and with those few words he silenced the critics.

That wasn't the end of the matter, though. The SEC stipulated that "market makers with negative equity in their accounts must cease doing business until the deficit is eliminated." We'd reached an oral understanding with a senior SEC staff member that this requirement could be satisfied by notes as well as equity. However, that didn't sit well with Pickard and produced yet another flap.

Just trying to stay on top of everything had become ever more demanding, and by the summer of 1976 I was frankly stressing out. One day as I was meeting with Tom Rzepski I broke into a cold sweat and almost fainted. I was rushed to the emergency room at Northwestern Hospital. After a couple of hours of tests and observation I was declared good to go. But I really wasn't ok. From that day forward for several years I often had a giddy feeling that could make it hard to concentrate.

On February 16, 1977, a shot was fired across our bow. The Amex announced it would begin trading options on National Semiconductor, which was already traded on the CBOE. This marked the first instance of head on competition between the two exchanges and the beginning of what could become a battle for survival. Just why the Amex chose to initiate such a conflict remains a mystery to me. It was already doing quite nicely, thank you, with exclusivity on some 60 stocks, and I don't believe it had the capacity to handle many more. But we treated this as a declaration of war and, in the parlance of the Cold War, decided upon massive retaliation. The next day CBOE announced that it would start trading on five of the Amex' most active stocks and thus commenced what we called the Dual Trading War. A hefty, usually mild mannered market maker named Jim Kipp had succeeded Leo Pomerance as chairman. That evening he conducted what amounted to a pep rally on the floor that concluded with a fist pump and a fiery exhortation, “Lets go get ‘em.”

A strategic objective was to capture the order flow of the big brokerage houses which most of them controlled with what was called a message switch. The switch was generally set, for stocks traded on multiple exchanges, to a designated primary market and this designation was typically based on which exchange had the most trading volume. (The SEC had been trying for years to foster a national market system in which each order in any given stock would be routed to the exchange that was posting the highest bid or lowest offer as the case may be. But quote generation systems at that time were somewhat ephemeral, and the national market system was more of a concept than a practice.)

So generating trading volume became the perceived formula for success, and generate it we would. CBOE’s multiple market makers knew how to put on relatively riskless spread positions with each other and then trade in and out of them to a fare-thee-well whereas an Amex specialist couldn’t trade with himself. So the CBOE’s volume in most of the dual listings swelled much higher, and we began pressing brokerage firms to pull their switch our way.

The SEC was aghast at these shenanigans. Chairman Rod Hills called them “chumming” and demanded that we put a halt to them. But unless the trading, however artificial, could be shown to be prearranged it wasn’t clearly against the rules. And our market makers weren’t going to let go of their weapons in what they considered a struggle for survival.

Under the microscope of SEC scrutiny, most firms weren’t about to pull their switches. So the artificial trading gradually subsided with CBOE keeping a dominant market share in National Semi and Amex dominant in the others. But this whole episode produced yet another set of strains both within the CBOE and with the SEC.

There wouldn’t be any more dual trading for many years to come. That left us with an exclusive list of stocks that was now up to 90 with trading volume averaging close to 100,000 contracts a day. There was more to celebrate on June 3, 1977 with the long awaited inauguration of trading in puts. Each of the now five options exchanges got an SEC allotment of five stocks for starters. However, there wouldn’t be any more expansion of listings or much else to celebrate for the next three years because a dark cloud was looming on the horizon.

The Moratorium

The storm cloud burst on July 27 when the SEC “requested” the exchanges to refrain from any further expansion of listings until it could conduct what was initially called a “review” but soon morphed into an “investigation and study of the adequacy of options regulation.” To take the SEC at its word, the impetus for this moratorium, as it became known, was "circumstances indicating the occurrence of abusive practices in the trading of standardized options and the apparent inability of the existing self-regulatory programs to address the incidence of such abuses." To make sure it was a request that couldn't be refused, the Commission proposed in the alternative to adopt a rule forbidding any expansion until after the completion of its study, which stretched into 1979.

I also believe there were other factors involved. For one, earlier in the year the New York Stock Exchange and NASDAQ had each proposed to start options trading that would encompass, for the first time, over-the-counter stocks. Also, the 1976 election had put a new Democratic president in office and with him came a new, more regulation minded SEC chairman. Harold Williams had been the dean of U.C.L.A.'s business school, and one of his first steps was to remove Lee Pickard as Director of Market Regulation.

I believe Williams was initially taken aback by the sheer enormity of the options market where, in share equivalent terms, trading volume in the 218 stocks now listed had grown to 70 percent of the volume on all of the some 1,500 stocks listed on the NYSE. Many years later he would recall, "I was very concerned about the growth of that market. I could appreciate the value as sort of a pricing mechanism and a hedging mechanism. But the options markets seemed to be getting way out of control and we weren't prepared to deal with it."

Needless to say, the SEC pronouncements sent shock waves throughout the CBOE community. The Commission's formal announcement of the Special Study of the Options Market had listed a litany of concerns to be examined including "possible fraudulent and manipulative practices" which our members knew to be unfounded.

In an attempt to allay fears and offer assurances the Board of Directors issued a memorandum to the membership that is worthy of excerpted repetition here:

The Board of Directors has today given direction to its staff and counsel for the preparation of a thoroughgoing response to all of the questions and concerns expressed in the SEC release and has also set in motion other steps to build recognition of the many investment purposes served by options, the health and strength of our trading system that serves as a model for the rest of the securities industry and our commitment to effective regulation of the market.

In setting these directions, the Board has acted with recognition of the deep resentment of our members over the many inaccurate impressions created by the SEC release. Its inappropriate reference to our market as a "pilot" and, worst of all, its wrongful implication that the problems of ongoing regulation of the options market have not been diligently addressed by this Exchange. Our submission to the SEC will address itself to all these points and will also strive to be constructive in relating to the

Commission's difficulties in dealing with the complexities of our market and its interaction with the market for underlying stocks.

In retrospect, I now believe the Options Study was warranted and useful. Hardly anything can grow so big as fast as our creation had without outpacing its controls. While the study found that "options can provide useful alternative investment strategies to those who understand the complexities of options trading," it also found shortcomings. The principal ones were abusive sales practices and lack of supervision on the part of member firms along with surveillance and investigative deficiencies on the part of the exchanges. CBOE capabilities and procedures were found to be superior to Amex, but there was much room for improvement on the part of all concerned. It would take another year for remedial measures to be put in place to the Commission's satisfaction before expansion of listings was allowed to resume in1980. When it did, new listings would be allocated by a lottery per an SEC mandate that precluded any more multiple listings for several years thereafter.

Meanwhile, in the fall of 1977 I made the bad mistake of taking sides in what was the first contested election for the CBOE chairmanship. The candidate I supported lost and while the man who won let me keep my title and was usually gracious to me, I no longer held much sway. My worst mistake, though, was not spending enough time on the exchange floor from opening day on to more fully understand the inner workings of the market. That lacking made it harder for me to empathize with floor members or to assess the validity of their grievances.

It was plainly time for me to move on. I was honored upon my departure by a portrait that still hangs in the exchange's board room. The painting I cherish most, though, was commissioned after I was gone by the head of another market maker clearing firm, Harry Brandt. Its depiction of a crowded trading floor places my visage front and center. A print has commanded a prominent place in every office I have occupied in my several post CBOE endeavors. While some of them may have been more financially rewarding, the CBOE's creation has given me by far the greatest psychic satisfaction of my life.