

*[Editor's Note: To get a firm grasp on the future of the options industry, we asked Option Wizard® Scan developer and financial writer John A. Sarkett to probe the minds of some industry professionals. He sent back the following report: Part I in this issue is an industry overview, which focuses mainly on equity options, but touches ever so slightly on futures options; Part II, to be published in next month's SFO, offers a closer look at the individual options trader and the eternal trading question: who wins, who loses and why?]*

Options . . . the always intriguing and inviting land of third Fridays, time decay, probabilities, variances and volatilities, both historical and implied. That archipelago in the financial ocean, composed of spreads and synthetics, straddles and strangles. Delta, gamma, vega, theta, rho. A place where butterflies and condors can roam, along side of rocket scientists, market wizards and shooters, billion-dollar hedge fund jockeys and undercapitalized newbies, the busters and the soon-to-be busted.

Some naked, some covered, but they all meet to compete.

Underneath all the esoteric symbolism here – and there is plenty in this business – there is a singular fact that keeps the industry growing: options serve a genuine financial need, the transfer of financial risk from the unwilling to the willing for the prospect of gain. That is more than enough to keep the disk drives on the exchange mainframes spinning hard each and every day, recording

## MUTUAL FUNDS COULD UP THE NUMBERS...MAYBE

Projections of an options volume growth rate of 15 to 20 percent (per thinkorswim's Sosnoff, with Tower Group research weighing in at 16 percent) might be too modest if one player in the investment world exercises his or her own options: the mutual fund manager.

At a recent Futures Industry Association meeting in Chicago, Walter G. Sall, chairman and CEO of Gateway Investment Advisers, L.P., in Cincinnati, noted that of 9,000 U.S. mutual funds, 3,900 are chartered to employ derivatives to meet their investment objectives. How many actually do? Just 236, he said.

Given recent mutual fund scrapes, however, one wonders how soon they'll soon be expanding into the derivatives world. Some of them have other fish to fry before they consider the next logical step along the path of helping their clients achieve alpha, if that is even possible.

# LOOKING OUT OVER A SEA OF OPTIONS

Whose Boat Will They Float?

By John Sarkett

**SFO** Stocks Futures & Options

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more and more transactions each year, even if there have been a few hiccups along the way.

And, so, while the most recent bear market slowed the growth of the options industry briefly, it didn't stop progress for long (see *Chart 1*, which shows options volume past and projected). Institutions picked up the slack during the volatile 2000-2003 period, according to the International Securities Exchange's Alex Jacobson. "Retail trading actually declined over the last few years, although it has come back a bit lately," he says. "The mix five years back was about 60-percent retail, 30-percent institutional and ten-percent firm. Retail has fallen to a little over 40 percent. The real growth came from middle-market institutions (e.g.,

hedge funds, \$50 million to \$500 million in assets) and an increase in private firm trading when the industry began to adopt WYSWYG electronic trading."

WYSWYG (what you see is what you get), by the way, refers to electronic trading in which the bid size and ask size are shown. Therefore, if "the bid is for five contracts," then only five contracts can be sold. Or, if "300 contracts are offered," then someone could buy 300 contracts by clicking on their mouse. In the "old days" (last year and for the previous 30 years), the size of the bid and the size of the ask were not available at options exchanges like at the New York Stock Exchange. The practice was to have a "standard size," such as 10 contracts or 20 contracts. But customers had to send a broker into the pit to find out where they could buy or sell more than the standard size.

### How Many Trade Options?

How many actual options traders are out there? "Everyone has a guess on the number of accounts, but because we don't clear down to the account level in the U.S., nobody will ever really know," Jacobson says. "I would estimate, however, that less than five percent of investors currently use options."

What about the big guys? "Institutionally, there are some 10,000 to 15,000 accounts," the ISE executive says. "The top 1,500 do most of the business. These are large pension funds and the like. Some forms of institutional use come and go. In flat markets, the overwriters reappear. This is where the institutions own a portfolio that mirrors the S&P, so they can sell calls or buy puts against it using index puts. Lately there has been some nice growth in capital structure arbitrage accounts, such as hedging credit risk with equity options."

And, some "nice growth" has been seen at one of the newer (three-plus years old) options brokerage specialists, OptionsXpress. President David Kalt says his firm had some 65,000 accounts as of November last year, up from 20,000 in March 2002. Whew!

But that's the *equity* options side.

On the *futures* side, the options situation generally is not nearly as positive. Jim Mooney, a principal with Infinity Brokerage in Chicago, estimates that, "Less than 20 percent of futures traders use futures options. And they don't use them very much." Mooney says he recently analyzed a run sheet at his company and found that across 1,000 trades, just 11 calls and six puts were transacted. So, less than two-percent futures options for that set of trades. Most trades were in E-minis (S&Ps, NASDAQs, Dows), T-bonds and soybeans.

Even if Mooney's analysis is a one-shot insight and, as such, anecdotal, options on futures, launched in the 1980s on a slew of futures contracts, haven't seen the kind of action across the board that futures have...or that equity options have.

### Who Trades Options?

So who is the equity options trader, demographically speaking? The Options Industry Council cites 1999 research (its most recent, although new research will be conducted soon) that describes the options trader as follows:

- 90 percent male
- Average age: 52.5
- Average liquid assets: \$866,000 (vs. \$809,000 for non-options traders)
- Confident: 81 percent believe they are knowledgeable about investing
- Educated: 99 percent have some college, 27 percent hold degrees, 52 percent of those holding degrees studied post-graduate
- Average number of options trades per year: 23.5 (vs. 34.9 for stocks)

### And Who Doesn't?

Among those surveyed who do not trade options, the reasons given were:

- 51 percent Have little knowledge/understanding of options
- 34 percent Too speculative/risky
- 22 percent Too many unknowns
- 14 percent Takes too much time to manage
- 4 percent High cost
- 5 percent Other

**CHART 1**

**Equity Options Volume from Inception**

Equity Options Volume	
1973	1,119,245
1974	5,682,907
1975	18,103,018
1976	32,373,925
1977	39,637,328
1978	57,231,018
1979	64,264,863
1980	96,728,546
1981	109,405,782
1982	137,264,816
1983	135,658,976
1984	118,925,239
1985	118,555,989
1986	141,930,945
1987	164,431,851
1988	114,927,723
1989	141,839,748
1990	111,425,744
1991	104,850,686
1992	106,484,452
1993	131,726,101
1994	149,932,665
1995	174,380,236
1996	199,117,729
1997	272,998,701
1998	329,641,875
1999	444,765,224
2000	672,871,757
2001	722,680,249
2002	709,784,014
2003	830,308,227
2004 (est. +16%)	963,157,543
2005 (est. +16%)	1,117,262,750

SOURCE to 2003: Options Clearing Corp.  
SOURCE 2004+: Industry experts variously project growth in years just ahead at 15-20

Perhaps most interesting, but confusing, is the high number of those who indicate that they do not trade options because they have little knowledge or understanding of these instruments. Granted, they may be somewhat arcane, but there's plenty of information out there about options...all one has to do is look (see sidebar – "Getting Educated, Options Style"). It's more likely that those who "have little knowledge" simply aren't interested.

### What's Ahead for the Industry?

Looking ahead, industry experts project significant growth for the industry. Tom Sosnoff, principal at thinkorswim options brokerage, expects 15 to 20 percent growth in options volume per year.

ISE's Jacobson is positive as well: "Retail can grow a little – retail growth is more driven by market action than anything else. Institutional volume, however, will double over the next few years and continue to grow at double digits for a while. Not all institutional is listed, and a lot is done via structured products with embedded options."

The U.S. options exchanges – now there are six, with the recent addition of the Boston Options Exchange (BOX) – continue to be pushed by each other to innovate and, in the end, gain market share. If institutional business is the one that brings the biggest action – and it typically is – the exchanges will continue to morph into the kind of institutions those customers want.

When the International Securities Exchange (ISE) joined the options "club" just a few years back, it changed the options landscape by presenting a totally electronic platform – the kind of thing that *all* new exchanges do these days because they don't want to be saddled with the overhead of a trading floor and, from a PR viewpoint, look like they are behind the times. The rest of the exchanges have had to follow in suit in some way, shape or form to compete and to stop the bleeding from their market share, even if they believe that the trading floor and human beings add a needed element to fair pricing in certain instances.

The Chicago Board Options Exchange (CBOE), unquestionably best known in the options arena for being the one that started it all back in 1973, was king of the equity options business until ISE came along and started making waves...and gaining volume in big handfuls. But one innovation often pushes another. In mid-2003, CBOE, still riding high with its proprietary index products, launched a unique trading model hybrid, called "hyTS," to combine the speed and liquidity of screen-based trading and floor-based markets. The thought is that although a non-floor-based system (which the CBOE also uses in spades) can have tremendous advantages, it often can't handle more complex order flow that requires some human intervention. It's anticipated that the hybrid system will handle about 600 classes by the end of first quarter 2004, representing more than 90 percent of U.S. equity options. That's progress.

CBOE Vice Chairman Ed Tilly readily admits that the ISE "taught" the CBOE a few things about screen-based systems. And why not? Every exchange is learning from every other one, and they are all embarking on innovations that will make them more appealing to users.

Six months ago, a panelist seated at the dais on which representatives of each options exchange sat, was asked, "Which options exchanges will be sitting on this panel five years from now?" His response, which sent "Oh, my Gods" throughout the audience, was that at least a couple of the five exchanges would probably no longer be conducting options business. It's a convenient response, but maybe not a foregone conclusion.

Even the smaller exchanges, like the Pacific Exchange (PCX) and the Philadelphia Stock Exchange (PHLX) are pushing to appeal to professionals and those who represent outside customers.

PHLX, as an example, completed the first phases of its electronic options trading initiative, PHLX XL, which ultimately will allow for market makers to stream quotes into PHLX books remotely. Among another half dozen moves, they incorporated some very handsome pricing innovations that helped strengthen their competitive position

## GETTING EDUCATED, OPTIONS STYLE

The futures exchanges, generally speaking, conduct their educational efforts to the individual investor/trader exclusive of each other, but U.S. options exchanges are a bit different. Not to say that the individual options exchanges aren't competing for business (they *most certainly* are), but educational efforts aimed at the retail public and the brokerage community are carried out on behalf of the group by the Options Industry Council (OIC) in Chicago.

Thus, individual investors looking for a way to learn more about options, without a broker asking for the order, might want to turn to the OIC first. There are options firms out there that, indeed, will be offering some excellent educational programs as well, but for starters, why not learn on your own schedule before delving into options trading?

A little more than a year ago, OIC introduced Options University (OU), a comprehensive educational mini-website that offers a variety of online options classes, strategy tools and other educational resources. After students register, they have full access to all the educational tools offered within OU and can learn at their own pace, at their own computer. Since its inception, OU has seen about 10,000 registrants.

OIC offers its free educational seminars nationwide in more than 90 cities. In 2003, OIC introduced two live seminars: "Directional Strategies: Trading Market Direction with Listed Options" and "Advanced Options for the Real World." And two new classes were introduced online: "Options Strategies in a Bull Market" and "Buying Puts."

For more information about these and other resources, including their new book, ***An Investor's Guide to Trading Options***, check out OIC's website – [www.888options.com](http://www.888options.com).

as a very low-cost marketplace. Thus, though options volume overall grew industry-wide, PHLX was the only floor-based exchange to gain market share in 2003, from 11.97 percent in 2002 to 13.15 percent, including five consecutive months of share growth from August to December. That may not sound like much, but with ISE in the driver's seat for much of the year, it can be considered quite an accomplishment for a smaller exchange.

In the end, the options business in the next few years may look very little like it does today. The competition is now and will continue to be driving lower cost for consumers, and that's a positive.

And there will be exchanges that will look at the "what's next besides options?" question. The Chicago Board Options Exchange, for one, has announced the launch of the CBOE Futures Exchange, which begins trading futures on the CBOE Volatility Index (VIX), what CBOE Chairman Bill Brodsky calls "the benchmark for gauging market sentiment." This, along with other volatility products to be introduced later, raises the issue of how far the business can expand, both for professionals and sophisticated retail traders.

### What Factors Point to More Active Retail Involvement?

Jerry Murray, with Chicago Options Traders Education Group and an active retail trader in Hoffman Estates, Ill., cites several factors that appear to be working in favor of increasing the options numbers: Boomers are aging. "They are increasingly active in managing their own finances prior to and post-retirement," Murray says. And, the younger generation is more financially savvy: "Better disposable incomes and education (relative to boomers) among the younger crowd are generating a higher percentage of traders in the Gen X population," Murray adds.

### Technology Helps

And, of course, technology marches ever onward. Murray says he believes this may be the single, biggest factor in the increasing use of options. Desktop and mobile technology is increasingly making the ability to participate in the markets available to anyone, anywhere. While this participation is not yet universal, the trend is up. More bandwidth and increases in availability have provided greater access to the real-time markets.

"What was only available to the wealthiest individuals and to institutions in the 1980s is readily available and affordable for most middle-income people today," Murray contends. "The average person could not even see real-time data in the late '80s unless they were in their broker's office. The processing capacity alone has made every desktop and laptop a potential trading station, and that trend is beginning to spill over into personal digital assistants (PDAs). As mobile transmission bandwidth expands, the trend will be clearly visible and is within a couple years of widespread availability."

"On the macro level, research company Tower Group estimates that retail options trading will grow at a 16-percent annual rate through 2005," OptionsXpress's Kalt says.

On a more micro level, OptionsXpress's Kalt sees this projected growth played out on almost a daily basis, as the company has been adding somewhere in the neighborhood of 5,000 new accounts per month. This is a tremendous ratchet up on a monthly basis, especially given the number of investors who have never used equity options. Sustainable? – one never knows. Kalt, of course, is hoping it just keeps on growing.

Author and noted options educator, Larry McMillan, isn't quite as hepped up as Kalt but does see continued growth or at least stabilization in the equity options business. Why? Well for one reason, says McMillan, "the bearish markets of not too many months back seem to have spurred people to learn about hedging techniques." And that may have put options into the limelight a bit more. All of these things are gradual processes, of course, and Rome was not built in a day. Nor options on Rome.

Yet even some of the most ambitious prognostications have seemed too low recently. In January, the equity options business somehow exploded in use with a volume increase 71 percent higher than the year prior. Seven trading days during that one month alone joined the list of top-10 highest volume days – and that's taking 31 years into account, since equity options were launched back in '73.

"Historically January's volume and open interest are high, but this year, January's numbers were astounding," said Paul Stevens, president of the Options Industry Council, the non-profit, educational arm (for the retail public) of the six U.S. options exchanges.

The outlook is not as sanguine on the futures side. Infinity's Mooney says, "Our peak in futures options was 1998, since then, it's been a long, slow decline. We had one trader, capitalized at \$20 million, who wanted to sell options. No FCMs would take the trades – too much risk. Unfortunately, futures options are not liquid, not all strikes get a bid and ask, so if the public can't see them, and if big traders can't place orders, it's hard to be bullish. We need a catalyst to spark interest. Precious metals might be that spark."

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