# Big Levers for Small Investors

On the new Chicago Board
Options Exchange, speculators with
a few hundred dollars can win
(or lose) big by buying options
on stocks they don't own.
Surer profits await option sellers.

by Gerald Appel

Let us now admire the investor who, last July 31, called his broker and told him to buy 100 shares of Atlantic Richfield at 86½ and who, on October 29, called his broker and told him to sell the stock at 108. The stock cost the investor \$8,650 (plus \$65 in commissions), and he sold it for \$10,800 (minus \$75 in commissions) for a profit of \$2,010, or nearly 23% in 90 days. Not bad.

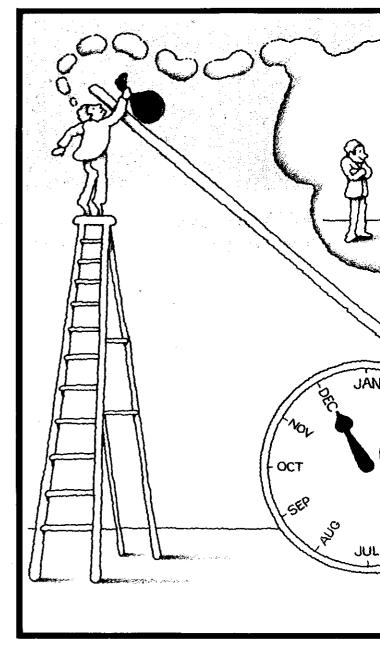
Let us now admire even more the investor who, on July 31, called his broker and told him to buy a call option on 100 shares of Atlantic Richfield at 10% and who, on October 29, called his broker and told him to sell the option at 28%. The option cost \$1,062.50 (plus \$25.49 in commissions), and he sold it for \$2,875 (minus \$55.06 in commissions) for a profit of \$1,731.95, or more than 151% in 90 days. Even better.

The difference is leverage—the seemingly magical force that enables investors with limited funds to make (or lose) large percentages by pinning their small fortunes to the large fortunes of others. It sounds a mite mysterious to the neophyte, but thanks to the creation last April of the Chicago Board Options Exchange (CBOE), leverage is now more readily available to small investors—even those with as little as a few hundred dollars available for a flutter on the market.

Call options on the CBOE are what the name implies: the option to buy (call) 100 shares of a particular common stock at a specified price (known as the "striking price") for a predetermined period of time. For example, the call designated "International Harvester April-30" represents the right to purchase 100 shares of International Harvester at a price of \$30 a share until 2:15 p.m. on the last business day of the coming April.

The person who buys an option expects that the price of the stock will rise sufficiently before the expiration date to more than offset the price he had to pay for the option, plus commissions. The intention of the seller (writer) of an

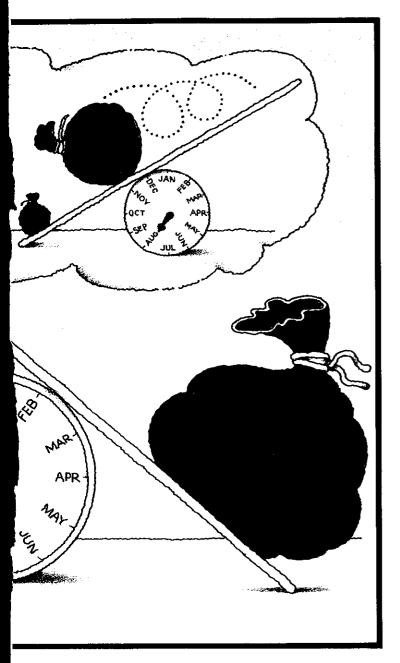
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option is merely to pocket the premium paid for the option. In this way, the stock he holds can earn considerable amounts of money in addition to dividends. By and large, option buying represents the more speculative approach, option selling the more conservative.

### From thin to fat

Before the birth of the CBOE, investors who were interested in call options had to seek out individual brokers who knew their way around the fragmented option market. Even then the market was so confused and diffuse that it was hard to find buyers or prices for specific options. The CBOE brought order to chaos, established reliable secondary trading and in general replaced a thin market with a fat one. It introduced standardized expiration dates and striking prices, plus a ticker-tape quotation service and liquidity for options traders. The roster of corporations listed on the Chicago Board has grown from 16 to 32 within seven months. As a result, growth of the exchange has been little short of spectacular. For the week that ended October 5 alone, more than 54,500 call options were traded in the 32 securities on the exchange. Nor has the lesson been lost elsewhere. The American Stock Exchange and the Philadelphia exchange



are hoping to introduce option trading in the next few months; before approving these plans, though, the SEC intends to hold hearings to evaluate the experience of the CBOE so far. E.F. Hutton, Reynolds Securities and Goldman, Sachs plan to launch a closed-end mutual fund next year with a portfolio including nothing but options.

The Chicago Board maintains a clearing corporation that matches buy and sell orders and guarantees the fulfillment of option obligations. Expiration dates of CBOE options are standardized on the last business days of January, April, July and October. Striking prices are derived by rounding off the market price to the nearest \$5, \$10 or \$20 when an option is introduced. Should the stock fluctuate widely in price, new options with new striking prices may be introduced, but old options continue to be traded until they expire or are exercised. Of the 38,703 options scheduled to expire last July 31, approximately 3,300 were exercised.

To understand some of the principles and procedures involved for both buyer and seller, it may be helpful to evaluate one particular option from both sides of the fence. Last October 12, International Harvester common closed at 35½ on the New York Stock Exchange. On the CBOE the International Harvester April-30 option ended trading that

day at 8¼, or a total of \$825 for the right to buy 100 shares of Harvester at the striking price of \$30 a share, established at the time the nine-month option was originally issued on July 30, 1973.

Suppose you wanted to become a seller of this option. You would probably already be holding, or would immediately buy, the shares of International Harvester against which you would sell the call. It is possible to sell calls "naked," in other words without the shares in hand (hoping prices do not rise), but this is highly speculative strategy. As a seller, your potential profits are the amount of money paid for the option, less expenses, plus any dividends paid while you hold the stock.

## Seller's rate: 15% a year

So let's assume that you buy Harvester at 35½, sell the call option at 8¼, and that the stock climbs to 45 over the following six months. You immediately lay out \$3,550 for the stock plus \$59.35 in commissions: total, \$3,609.35. You will collect the \$800 net payment for the option immediately, however, so the initial investment amounts to only \$2,809.35. If he exercises the option, the call buyer will have to pay only \$30 a share for the \$45 securities. You, in turn, will receive only \$30 a share.

The mathematics of your transaction go like this:

### INCOME:

Proceeds from option sale at 81/4	.\$ 825.00
Proceeds from sale of securities at 30	
when the call is exercised	<b>3,000.00</b>
Dividends received on shareholdings	
over six months	<b>70.00</b>
Total income	\$3,895.00
EXPENSES:	
Cost of shares	\$3,550.00
Purchase commissions	<b>59.3</b> 5
Minimum commission to sell the option	. 25.00
Minimum commission if the option	
is exercised at 30	49.00
Total expenses	\$3,683.35
PROFIT: \$3,895.00 minus \$3,683.35 equals	\$ 211.65

Based on the initial outlay of \$2,809.35, this amounts to a pretax return of  $7\frac{1}{2}\%$  in six months, or an annual rate of 15%. As the option seller in this case, you can never realize a profit of greater than  $7\frac{1}{2}\%$  on your investment, no matter how high International Harvester rises in price. Your income remains limited to the amount of the premium you have received, and you remain obligated to deliver the shares at a price of 30. Your annual rate of return, however, can increase if the option is exercised in less than six months. For example, if the option is exercised in three months, your annual rate rises to 30%.

As the option seller, you would realize your full gain even if the value of Harvester shares were to decline by as much as 15½%, down to the striking price of 30. Moreover, the premium you have received will protect you against a loss even if Harvester drops to 28, a decline in price of

21.1%. The \$750 decline in the value of your stock in that event is more than offset by the \$870 you have received in net option premiums and dividend payout.

This is the major advantage of option selling: when you sell an option, you are starting your venture with profit in hand and can suffer a loss only if the value of your holdings suffers a very serious decline. Once an option against a

# 13 big winners, 17 big losers

A sampling of options on the 32 stocks now available on the CBOE shows the broad range of possible percentage gains and losses. Most of the options were issued last July and August; all of them expire next April. A dash in the price-change column indicates the recent price was the same as the original issue price.

COMPANY	STRIKING PRICE	RECENT STOCK PRICE	RECENT OPTION PRICE	OPTION PRICE CHANGE
AT&T	50	483/8	23/4	- 31.3%
Atlantic				
Richfield	80	1101/8	341/4	+100
Avon Products	120	89	$3\frac{1}{2}$	<b>- 70.8</b>
Bethlehem Steel	30	$32\frac{7}{8}$	61/4	+100
Brunswick	20	$24\frac{1}{2}$	7	- 3.4
Eastman Kodak	140	131¾	9	<b>- 40</b>
Exxon	100	95	61/8	<b>- 30</b>
Ford	60	<b>50</b> ¾	<b>2</b> 1/8	- 51.1
First National				
City	50	<b>48</b> ¾	$5\frac{1}{2}$	+ 29.4
Gulf & Western	25	28	61/8	+ 11.4
Great Western				
Financial	20	22	$5\frac{1}{8}$	+ 24.2
IBM	270	$281\frac{1}{4}$	36	+ 94.6
INA	40	<b>36</b> ⅓8	$3\frac{1}{2}$	- 20
ITT	35	$33\frac{1}{8}$	4	- 31.9
International				
Harvester	30	31	43/4	_
Kerr-McGee	65	85	$24\frac{1}{2}$	$\pm 237.9$
S.S. Kresge	40	373/8	<b>3</b> ¾	- 36.2
Loews	25	$24\frac{1}{2}$	33/8	<b>- 40</b>
3M	95	881/8	$6\frac{1}{2}$	_
McDonald's	60	69	16	+ 21.9
Merck	100	<b>85</b> 5⁄8	41/8	<b>- 49.2</b>
Monsanto	70	$63\frac{1}{2}$	71/4	- 34.1
Northwest				
Airlines	25	$23\frac{7}{8}$	37/8	- 16.2
Pennzoil	25	<b>25</b> 3/8	41/8	+ 37.5
Polaroid	130	955/8	51/4	<b>- 76.1</b>
RCA	25	24	31/8	- 35.9
Sears, Roebuck	100	943/8	71/4	- 21.6
Sperry Rand	45	$51\frac{1}{2}$	12	+ 50
Texas	-			•
Instruments	100	1321/2	44	+120
Upjohn	100	905/8	83/4	- 47
Weyerhaeuser	60	74	191/4	+ 42.6
Xerox	160	1461/2	81/4	- 52.9

block of stock expires, you can simply sell another on the same stock. Offsetting this advantage is the amount of capital involved in purchasing and holding the underlying common stock and the fact that you are bound by a six-month obligation to deliver shares at a specified price.

Returns (as well as risks) may be increased by selling options against stocks bought on margin, since the seller then has less cash tied up. Current margin requirements allow investors to buy most listed securities by depositing only 65% of the cost and borrowing the rest from their brokerage houses at current rates of interest, usually about 1% to 2% above the prime rate that banks charge their best corporate customers.

### The buy side

Option buyers run greater risks than option sellers, but the rewards can also be greater. In the case of that International Harvester April-30 call, the buyer has paid out \$850 (\$825 premium cost plus commissions) as his ante for the right to purchase the shares at \$30. Again suppose that the shares rise to \$45 within the life of the option. For the buyer, the balance sheet looks like this:

INCOME:	
Proceeds from sale of 100 shares at 45	.\$4,500.00
EXPENSES:	
Cost of option, including commissions	. 850.00
Cost of shares at the striking price of 30	. 3,000.00
Commissions to exercise option	
and sell shares (minimum)	117.75
Total expenses	\$3,967.75
PROFIT: \$4,500.00 minus \$3,967.75	\$ 532.25

The profit represents a return of 62.6% within six months, even though the stock has risen by only 26.8%. Since the buyer sells the stock on the same day that he exercises the option, no capital is tied up in stock ownership.

By maintaining a market where buyers can sell options rather than exercise them, the CBOE increases payoffs by saving stock purchase commissions. With International Harvester at \$45, an option to buy 100 shares at \$30 ought to be worth at least \$15 a share (in practice, somewhat more or less depending upon the amount of life remaining in the option). Therefore the holder of the Harvester option can resell his option, purchased at a cost of \$825, for \$1,500, realizing a net profit after commissions of \$618.50, or 72.8% of the original investment-again based upon an underlying security that has gained only 26.8%.

Unfortunately, the high profit potential on the buy side is matched by concomitant risk. Were International Harvester to fall by 15.8%, to 29%, and remain there through the option's expiration, the call would expire worthless and the call holder would lose 100% of his investment-a complete wipeout. This is a very real risk, and because of it only a fraction of investment portfolios should consist of option holdings. In fact, a purchaser of the International Harvester April-30 calls in our examples would require a 111/2% rise in Harvester shares just to break even. Unlike the seller, the option buyer starts his venture with a loss, represented in this case by the cost of the option minus the differential between the striking price and the higher current market value of the shares. The call buyer, however, can never lose more in dollars than the price of his option, no matter how low Harvester falls.

Procedures for both buying and selling options on the

### BIG LEVERS continued

Chicago Board are quite simple. To buy an option, you merely call your broker (most are CBOE members by now), secure a quote and place your order—just as though you were purchasing shares of common stock. You are required to pay the option premium immediately. The procedure is simply reversed for selling, presuming the underlying shares are being held for you by your broker. Major financial newspapers now provide daily or weekly coverage of CBOE option activity and prices.

# Hoping for a rise

If you're interested in options on stocks not listed on the CBOE, options may still be sold and purchased over the counter through members of the Put and Call Brokers and Dealers Association. Barron's Financial Weekly and the Wall Street Journal, among others, carry advertisements from option houses that provide free material detailing procedures. These dealers also offer puts (the right to sell a stock at a specified price until a specified time) and straddles (a combination put and call). If you sell a non-CBOE option, however, remember that the buyer, if he exercises, receives any dividends paid on the stock during the life of the option. On the CBOE, the seller keeps the dividends.

Although option selling is essentially conservative and option buying essentially speculative, the buyer and seller are both hoping for a rise in the stock price. The faster the prices rise and the sooner options are exercised, the faster the seller can turn over his money and increase his annual rate of return. Option sellers seeking maximum safety should limit their offerings to securities paying high dividends and selling at low price/earnings multiples (the price of a share divided by the latest twelve-month earnings). For maximum earnings potential, on the other hand, option sellers might consider volatile, speculative holdings.

Option selling can also be used as a hedge against a possible decline in stock prices or as a means of converting a short-term gain into a long-term one, with a favorable tax consequences. For example, suppose you had purchased International Harvester last June at 27 and, unsure of the market, were contemplating a sale in October at 34. You could sell the April-30 option as an alternative. The payment you received from the option buyer would offset about a seven-point decline and, if the shares were called, you would in effect have sold the stock for a few points above the price you might have otherwise accepted. In addition, if the call was not exercised until January, any short-term gains would be converted to long term.

CBOE sellers are not necessarily locked into stock positions against which they have sold options. If they wish, they can close out the position by buying an option of similar striking price and expiration to offset the option that has been sold, thereby canceling out their obligation.

For example, suppose an investor had purchased 100 shares of Brunswick at 26½ on September 28, simultaneously selling the Brunswick January-25 call for 4¾. By November 1, the stock market seemed to be weakening. Fearing a serious decline, he decided to liquidate his position. On that day he could have sold his Brunswick shares for 24, suffering a 2½-point loss on the common. To provide stock to cover the option he had previously sold, he might have purchased a January-25 option, which, as a result of the decline in the underlying common, was then selling for 2¼. This investor would have made 2½ points by first selling the option at 4¾ and later repurchasing it for only 2¼. In this case, the profit happened to offset the loss on the com-

mon position exactly. The only loss arising from the entire maneuver was the amount of the commissions involved, a total of \$147.96. The figures for the transaction:

INCOME

INCOME:	
Received for the sale of the	-
January-25 call	\$ 475.00
Received for the sale of	
100 shares of Brunswick	2,400.00
Total income	\$2,875.00
EXPENSES:	
Cost of 100 shares of Brunswick	\$2,650.00
Cost of purchasing the January-25 call	225.00
Commissions—to purchase the Brunswick	. 50.44
—to sell the January-25 call	. 25.00
-to purchase the January-25 call	. 25.00
-to sell the Brunswick	. 47.52
Total expenses	\$3,022.96
LOSS: \$3,022.96 minus \$2,875.00	.\$ 147.96

An option *buyer* need not suffer a complete loss if his venture fails. If some life remains in the option he has purchased on the CBOE, he can usually resell it, thereby salvaging some of the price.

A prospectus explaining the Chicago Board Option Exchange can be obtained by writing to the Exchange at 141 West Jackson Boulevard, Chicago, Illinois 60604.

Since the CBOE has been in existence only seven months there are no long-term results, but over the short term option sellers have done very well. There were 36 options, covering 16 corporations, in continuous trading on the CBOE from May 11, 1973 to October 27. Thirty-four of the 36 positions sold at the beginning of this period produced profits for option sellers. Eleven of the 16 stocks rose, but of the five that declined, only one, Polaroid, declined enough to wipe out the option payment plus dividends.

Buyers did not fare as well. Still, the largest individual gains—as well as the biggest losses—occurred on the buy side. From May 11 to October 27 there were ten winning options against 26 losers, a winning percentage of only 27.8. Big losers included Polaroid October-130, down 99.7%, and Ford October-60 and Eastman Kodak October-140, both down 99%. The stellar winner was Texas Instruments, whose October and January options rose in price by 209% and 194% respectively during the 5½ months. Atlantic Richfield and Sperry Rand both produced around 100% profits for their lucky and/or astute holders.

Of course, investors with excellent market timing could have generated powerful gains by fast trading. For example, the Brunswick October-20 declined from 61% in May to 51% on October 27 for a loss of 14.3%. This option, however, traded as low as 50¢ in July. A purchaser at that time could have made 950% within four months.

In assessing these results you should keep in mind that this was a period of generally rising market prices. From May 11 to October 27, the Dow Jones industrials rose from 927.98 to 987.06, a gain of 6.4%. In declining markets, results for both buyers and sellers would be less favorable, although sellers would probably continue to fare better, on average. In general, CBOE option trading promises to stay profitable on the sell side, where it has already produced consistent, if limited, returns. Most buyers have been burnt so far, but for a lucky minority profits have proved very pretty indeed.