

# THE A B C OF OPTIONS AND ARBITRAGE

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## CHAPTER I.

### DEFINITION OF STOCK OPTIONS.

TRADING in options in the New York and London stock markets is governed by important differences of method. Abroad, the Committee of the London Stock Exchange, recognizes the legality of option dealing in stocks conducted under certain rules, but in New York the Stock Exchange does not recognize option trading. Outside of the New York Stock Exchange itself, however, Stock Exchange members and firms deal in options under rules regulated by custom and on contracts recognized and enforced by the civil law. The Wall Street option market has very narrow limitations, but some time in the future it is probable that it will play a much more interesting part in the day's work of the money market than it does to-day.

Mr. Charles Castelli in *\*The Theory of Options in Stocks and Shares* thus defines stock options: "By the payment of an agreed premium, an operator in stocks and shares acquires the faculty of becoming either a buyer or a seller of stock at a fixed price and for a determined period. The

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\* London, 1877.

loss is simply limited to his disbursement for such period, whereas the profit is indefinite, depending solely upon the favorable movements of the stock operated in, during the time he can exercise this right."

Mr. Leonard R. Higgins, in *\*The Put-and-Call* says: "The word *Option* in connection with transactions in stocks and shares, means a right to buy or sell a certain quantity of stock on a given day, at a price agreed upon at the time the bargain is struck, for which right the 'giver' of option money pays a consideration to the 'taker'; the said option money being payable at the end of the stipulated option period.

"The payment of option money may purchase the right: *First*, to buy stock at a given price, at a specified future date, this option being known as the 'Call.' At the end† of the option period, the 'giver' declares whether he will exercise his option and Call the stock or not.

"*Secondly*, to sell stock at a given price at a specified future date; the option is then called a 'Put'. When the

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\* London, 1902.

† In Wall Street the option is so written that its owner can exercise the rights therein contained "on one day's notice except the last day, when notice is not required." This distinguishes the New York option from that of London, where the rights can only be exercised on a specified future date.

option expires, the 'giver' tells the 'taker' whether he wishes to put the stock on him at the agreed price or not.\*

*"Thirdly*, to either buy or sell (whichever may suit the 'giver') stock at a prescribed price at a specified future date; the name of the double option is the 'Put-and-Call.'"<sup>†</sup>

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\* In New York this declaration is only necessary when the rights in the option are exercised. Also in London, in actual practice, the formal declaration of an option only takes place when the market price at option time is so close to the agreed price of the option that the bargain does not speak for itself. When the market price of the stock is distinctly above or below, it is understood by the "taker" that the stock is bought or sold, as the case may be.

† Called a "straddle" in Wall Street.

## CHAPTER II.

### THE PRACTICE OF OPTION TRADING.

THE practice of option trading in stocks is an old one. In Wall Street there is always more or less trading in options but the trade is not conducted on scientific lines. Here the option is bought with the idea and advantage of exercising its privileges before the option matures or expires. In London, where the business is more of a science, the privilege of the option must be exercised on a stipulated day. There exists in this requirement an advantage for the seller of the option.

The London buyer of options is accustomed to "trade against his options" to a much greater extent than the New Yorker, and trading of this character calls for quite complicated calculations that would puzzle and confuse the average American stock speculator who wants a simple, rather than a complicated proposition, and who preferably always demands a quick, rather than a slow decision. The English stock speculator apparently is slower, more patient and willing to work harder to secure a profit than his American contemporary, who despises small profits,

and has a world-wide reputation among financiers for his failure to give proper regard to his interest account. Perhaps, for the same reasons, English, German and French financiers are more skilled in the science of the foreign exchanges where the problems are complicated, and the profits sometimes very small, but in the aggregate make a very important part of the banking business.

It is unquestionably a fact that the option business occupies a much higher status among financiers in London than it does among those of New York. "The basis of the London option dealers' quotation seems vague," says a Wall Street student of finance, "and on superficial view his offer to take  $5\frac{1}{2}$  per cent. for the 'Put-and-Call' (or Straddle) of Louisville & Nashville over a period of two months looks like a mere bet, but it is nothing of the kind. He works by rule of thumb, but he has an exact theory behind it. He knows that the average quotations of Louisville & Nashville will not fluctuate so much as that over a great number of two monthly periods, and he works exactly upon the lines of any other dealers in insurance. Just as the seller of life insurance knows that accident or unsuspected disease may call upon him in one particular case to disburse a very heavy premium for a risk only recently taken, yet at the same time his actuaries tables tell him that if he can only get enough business of



the kind, the law of averages will bring him out with expenses and a legitimate profit. The option seller uses exactly the same principle that the bookmaker does when he 'lays' every horse in a race. He knows that if he can 'lay his book round' he stands to make a profit whatever horse wins, provided of course he makes no bad bets. That is the position of the London option dealer. In his mind he makes a sum about as follows:

	Per cent.
The average two months' fluctuation, say.....	4½
Working cost, interest on capital, and other contingencies, say.....	⅜
Margin of profit.....	½
Total .....	5⅜

"Of course the option dealer is also an active trader in the market, and he can protect himself from the loss involved in some extraordinary fluctuation by buying or selling stock. Experience, however, has taught him that the less he does of this the better, and it will be found that a very small part of the option dealer's business consists in direct transactions in the Stock Exchange. If the stock is put to him on an option, of course he sells it, and if it is bought from him, he buys it again to the greatest advantage in order to deliver.

"But his system is sound, and he knows that if he works

it properly, the law of averages will bring him home. He says himself that a hundred tips are given for one that comes off, and possibly his mental attitude favors a position where he backs inertia against activity. Nevertheless the options he sells are of definite and ascertainable value or there would not be a market for them."

## CHAPTER III.

### AMERICAN CONTRACT FORMS.

A CALL gives the owner and holder the right to call upon and buy from the writer of the privilege a certain amount of stock at a specified price, usually above the market, *within a limited time*. A Wall Street privilege carries with it the right to exercise delivery of the stock *within a limited time*. The London privilege *specifies a certain date*. At any time within the life of the Wall Street privilege you can exercise its rights. In London the privilege is confined to a certain day, and before its maturity if it shows you a profit, you are obliged to trade in the open market and then balance the operation on settlement day.

A Call reads as follows:

New York.....19

FOR VALUE RECEIVED, the bearer may CALL ON ME on one day's notice except last day when notice is not required  
.....  
of the .....Stock of the.....  
.....Company, at .....  
.....per cent. any time in.....days from date.

All dividends for which Transfer Books close during said time, go with the Stock.

Expires.....19 .....  
 .....M

Assume that Union Pacific was selling at 100 and you bought a Call to run one week at 101 for \$100. If your transaction is confined simply to the Call the stock must sell above  $102\frac{1}{8}$  within the week before you derive any profit. If it sells at 102 and you Call from the writer of the privilege 100 shares at 101 you receive and pay for it at that price. You then sell the stock in the open market at 102. Your commission is  $\frac{1}{8}$ . You paid \$100 for your Call and you recover your option money. Anything above  $102\frac{1}{8}$  would be net profit. If the stock went down your loss would be confined to the \$100 you paid for the privilege.

But, assume that you were a "bear" and were "short" 100 shares of Union Pacific at 100. If the market advanced you could Call the stock and deliver it on your "bear" commitment and thus limit your loss to approximately \$100. You would have been insured against further loss through the rights sold with the privilege.

A Put reads as follows:

New York.....19

**FOR VALUE RECEIVED, the bearer may DELIVER ME, on**

one day's notice except last day when notice is not required  
 .....Shares of the.....Stock of the  
 .....Company, at .....  
 per cent. any time in .....days from date.

All dividends for which Transfer Books close during  
 said time, go with the Stock

Expires.....19 .....  
 .....M

A Put is the opposite of a Call.

Assume, for example, that Union Pacific is selling at 100. You believe that it will decline. You buy a Put at 99, good for one week for \$100. If it declines below 99 you buy 100 shares of stock in the open market and deliver it to the writer of the privilege, deriving the difference between the option price and the market price. Your risk would be limited to the amount of the option money. If you were a speculator and the owner of 100 shares of Union Pacific and wished to insure it against loss for a specified time, a Put would act as an insurance policy against loss. The cost of the option would be the amount of your insurance premium.

Traders at times exercise privileges in another way. Assume that you are a trader and own a Put on 100 Union Pacific at 99. The market declined to 98, and against the Put you bought 50 shares at 98, and again 50

shares at 97. In the event of a rally you could sell out your "long" stock. If there is another decline you could rebuy and resell, on a second rally, protected by the Put.

Experienced traders, however, find that the latter operation works out better in theory than in practice.

A Spread reads as follows:

FOR VALUE RECEIVED, the bearer may DELIVER TO ME,  
 .....Shares of ..... at ..... or  
 Call upon me for.....Shares of.....at  
 .....at any time within .....days from date.  
 Expires.....19  
 .....M .....

If Union Pacific is quoted at 100 the Call price would probably be 101 and the Put price 99.

Protected by such a privilege a trader can make ventures in the open market on either side.

Yet another privilege is called the Straddle. This carries the right to Put or Call a number of shares of a specified stock at the same price. A Straddle on Union Pacific at 100 would give you the right to receive it or deliver it at 100 up to and at the maturity of the option.