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EVALUATION OF COMMON STOCK WARRANTS
AS AN INVESTMENT

by

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B.B.A. in Finance, Washburn University, 1960

An Independent Study
submitted to the Faculty of the
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the requirements for a
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This independent study submitted by Arthur J. Bailey in partial fulfillment of the requirements for the Degree of Master of Science in the University of North Dakota is hereby approved by the Committee under whom the work has been done.

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ABSTRACT

The common stock warrant, a security traded on most stock exchanges, is little known to the investing public. This is an evaluation of the common stock warrant as an investment. This study briefly describes corporate securities and the role of the common stock warrant. The reasons corporations issue common stock warrants, as well as stocks and bonds, are appraised.

The reservations and restrictions, applicable to common stock warrants, by the Securities and Exchange Commission are considered. The study discusses how each common stock warrant issue confers upon the holder the privilege of exchanging them for the common stock of a company.

Leverage or "trading on the equity" with the use of common stock warrants and the large price swings that are possible, due to the volatility of the common stock warrant, is presented. An illustration demonstrating how warrants are used in a short sale and hedge operation is included. It is possible to use the common stock warrant in a variety of security situations and it is recommended for investment purposes.

CHAPTER I

INTRODUCTION

The corporate form of business may issue various securities to obtain funds. These securities include bonds, stocks, and common stock warrants.

The major forms of financing are equity funds and debt funds. Equity is the amount of funds contributed by the owners of the business, and debt is the amount owed to the creditors. When it is necessary to borrow funds for a long period of time the agreement will provide a promise to pay interest at regular intervals and to repay the principle debt when due. This long-term debt is represented by a bond which is simply a long-term promissory note. Bond issues are usually of substantial size.

Secured long-term debt may be classified according to the priority of its claims. A senior mortgage is a mortgage with prior claims on assets and earnings.[1]

Unsecured bonds are debentures and provide no lien on specific property. Debenture holders are therefore general creditors whose claim is protected by property not otherwise pledged.[2]

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[1] J. Fred Weston, Managerial Finance, (New York: Holt, Rinehart and Winston), p.351.

[2] Ibid., 354.

Convertible bonds issued by some corporations are exchangeable for common stock at the option of the holder. The convertible feature permits the investor to hedge against a boom and inflation or in the event of a business collapse he has the protection of a senior security.

Corporations going through reorganizations may issue income and adjustment bonds which generally pay interest only if income is actually earned by the company. While interest is not a fixed charge the principal must be paid when due. Bonds have priority in earnings and in liquidation, a definite maturity, as well as the holder receiving a fixed income. Bond holders do not participate in any superior earnings of the company nor do they have the right to vote.

Equity funds are represented by the investment in preferred and common stock securities. Unless otherwise specified, preferred and common stocks possess the same rights and privileges. The term "preferred" or "preference" connotes a superior status with respect to priority in the receipt of dividends or of participation from assets in case of dissolution or both. Stock which is preferred as to dividends is entitled in each year to receive its share before the common stock can receive any dividends, although there is no guarantee either stock will receive any dividends.

A warrant is issued by corporations and is an integral part of the capitalization of a company. Warrants are options to buy a stated number of shares of common stock. While all warrants are convertible into common stock, at or before a

certain time and a stipulated price with an additional payment of money similar to some convertible bonds, they are referred to as being "exercisable" rather than "convertible".

A common stock warrant is sometimes confused with the heading used on subscription rights. "Warrant" is the name used to head the certificate which identifies a subscription right.[1] A company wishing to issue new or additional securities often gives its stockholders an opportunity to buy these securities in proportion to their present holdings before the public offering is made. Under these conditions the company issues subscription rights to its stockholders. If the stockholder chooses not to exercise his rights to buy additional securities, he simply asks his broker to sell the rights for him. These rights will be traded in the market during their stipulated life.

Common stock warrants provide for the purchase of a stated type of common stock from the corporation issuing the warrant. Warrants differ as to the number of shares or fractional shares of stock which can be purchased. The purchase price of each share of stock is indicated and may vary as time progresses. The length of life of warrants is specified. They may be perpetual (as long as the corporation is in existence), or for a specific number of years, or as long as any of the purchasable security is outstanding. The longer the term of the warrant, the greater is its value

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[1] Poyntz Tyler, Securities, Exchanges and the SEC (New York: The H. W. Wilson Company), p. 41.

to the investor. Only after the exchange of warrants for common stock does the investor have a say in the management of the corporation. Warrants do not entitle the investor to dividends nor any other ownership privileges including the right to vote, right to inspect the corporate books, or the right to share residual assets upon dissolution.

It is possible to have warrants in any of the following categories: (1) fixed price-no time limit, (2) fixed price-as long as stock is outstanding, (3) fixed price-limited number of years, (4) fixed price-decreasing number of shares depending on time of exercise, (5) increasing price-depending on number of warrants exercised.[1] Some warrants are made redeemable since their exercise might effect a change in the control of the corporation, when the control of the corporation is closely contested. Recent proxy contests indicate this possibility.

Table 1 is an illustration of various warrant conditions. The following method is used to determine if a warrant is selling at a premium. The recent closing price of the Alleghany Corp. warrant was $8 and the exercise price per share is $3.75. The purchase price of the warrant is $8, the warrant plus the $3.75 exercise price totals $11.75. This is twenty-five cents or ¼ for the warrant premium. This small premium indicates investors do not expect the stock to move up in price.

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[1] Gilbert Harold, Corporation Finance (3 rd ed. rev.; New York: Barnes and Noble, Inc., 1956), p.119.

TABLE 1

SOME WARRANTS FOR COMMON STOCK PURCHASE*

	[a]No. Com. Shares	[b]Price Per Share	Warrants Expire	Recent Price Warrant	Recent Price Stock	*Warrant Premium
Alleghany Corporation.....	1	$3.75	Perpetual	8	$11\frac{1}{2}$	$\frac{1}{4}$
Atlas Corporation.........	1	6.25	Perpetual	1	2	$5\frac{1}{4}$
General Acceptance........	1	20	Nov. 1, '69	5	20	5
Hilton Hotels.............	1	[c]46	Oct. 15, '71	7	16	25
Martin Marietta...........	2.73	14.65	Nov. 1, '68	20	21	7.67
Pacific Petroleums........	1.1	19	Mar. 31, '68	6	11	11.90
Tri-Continental Corp......	1.27	17.76	Perpetual	41	50	

[a]Number of shares on which warrant has a call. [b]American Stock Exchange. [c]Also $\frac{1}{2}$ share of Hilton Int'l.

*Source: "Stock Warrants; Media for Speculators," Financial World, April 14, 1965, p. 11.

Information on common stock warrants with the exception of price quotations is not readily available and is at times difficult to obtain. Merrill Lynch, Pierce, Fenner and Smith regularly publish information on stocks and bonds but do not mention warrants.[1] They have such information and will, on request, give it to an investor. They list and publish data on the various other securities of corporations who have warrants outstanding.

The warrant falls under the Securities Act of 1933 and the Securities Exchange Act of 1934.

The Security and Exchange Commission has developed a prototype of an ideal corporate charter. However, it applies only to companies subject to the Public Utilities Holding Company Act. All electric and gas companies under SEC jurisdiction have to issue clearly defined securities. A bond must be a bond, a common stock a common stock. Income bonds--a bond whose interest is payable only when earned--have not been permitted. Common stocks must have a vote. Non-voting or levered voting stocks, which grant disproportionate power to insiders, are forbidden. These stipulations are sufficient to illustrate the next point. The SEC also has opposed the issuance of warrants to purchase common stock. They feel warrants constitute a prospective dilution of earning power. Warrant holders can convert into common stock at will, either to collect increased dividends

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[1] Merrill Lynch, Pierce, Fenner and Smith, <u>Security and Industrial Survey</u>, (New York: Securities Research Division, December, 1966).

or to dump stock on the market at high prices. In either case this is not advantageous to the small unwary shareholder The National Association of Securities Administrators has twice studied warrants and determined they were not satisfactory since they do not fall into the catagory of being clearly defined securities.[1]

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[1]Joseph A. Livingston, The American Stockbroker (Philadelphia and New York: J. B. Lippincott Company, 1958), p. 207.

CHAPTER II

REASON FOR ISSUE OF WARRANTS

Warrants originally were devised to give a participating privilege to bond and preferred share holders in common shares.[1] They are issued and used for compensating underwriters, promoters, and company executives.

Warrants were used in the corporate reorganization of the Alleghany Corporation. In the 1920's the Van Sweringen brothers created a giant holding company with a total of $1.5 billion in assets.[2] Then came a market crash, and by 1937 the Van Sweringens lost control to Allan P. Kirby and the late Robert R. Young. Alleghany's common stock was $25 "under water", i.e., the claims of its bond and preferred holders, including back dividends, exceeded its net assets by $25 per share of common stock. In 1952 the extensive back dividend claims of preferred holders were eliminated by offering them a bond in exchange. With each bond was included twenty warrants. This originated 1,092,000 Alleghany common stock for $3.75 a share. The warrants have no expiration date.

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[1]James Clarence Coe, Common Stocks for Investor and Trades (1st ed.; New York: Vantage Press, 1961), p. 45.

[2]"Warrants; Hope for Sale", Forbes, January 15, 1964, pp.12-13.

Warrants are created through mergers.[1] When Symington-Gould and Wayne Pump merged, warrants were created in this manner. They were issued to stockholders of the sell-out company as a "sweetner" to make the merger terms more attractive.

In the speculative fever of 1960-1962 a prime example of how warrants came into being and their power was illustrated by BBM Photocopy. This small firm was underwritten by the brokerage of M. A. Lomasney and Co.[2] As part of its contract, M. A. Lomasney and Co. was granted 20,000 warrants at one cent each, the warrant exercisable at $3. M. A. Lomasney and Co. then underwrote 100,000 shares of BBM at $3 a share, receiving the usual commission. This meant that BBM Photocopy Corp. received less than $280,000 for its shares. Within a short time BBM was selling for $40 a share, which gave the warrants a value of around $800,000.

Another reason for the issuance of warrants is to counteract inflationary tendencies.[3] The types of corporate bonds available are convertible bond and bonds carrying stock purchase warrants, the convertible bond can be exchanged for a specified number of shares of stock with or without the

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[1]"Stock Warrants; for the Sophisticate," Financial World, November 11, 1964, p. 10.

[2]Robert Sobel, The Big Board: A History of the New York Stock Market (New York: The Free Press, 1965), p. 363.

[3]Robert U. Cooper, Investments for Professional People (New York: The Macmillan Company, 1951), pp. 179-180.

payment of additional money. Bonds with attached warrants permit the holder to purchase a given number of shares of stock at a stated price.

From the standpoint of the corporation there are three chief advantages in the issue of these two types of bonds: (1) They attract speculative capital, normally not interested in bonds, and thereby facilitate the flotation of the issue at a relatively low interest rate. Therefore, some, though few, investors realize that since the price of the security carrying the warrant is higher than it probably would have been without the warrant, they are in reality making a down-payment on the purchasable stock which they may or may not sometime buy. In other words they are buying an option, and part of the price of the security to which it is attached is the cost of the option.

(2) Any subsequent conversion of the bonds into stocks results in a proportional reduction in the corporation's fixed charges. (3) Such conversion increases the proportion of equity capital to borrowed capital which is generally considered a desirable change in capital structure.[1]

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[1] *Ibid.*, p.180.

CHAPTER III

LEVERAGE AND PRICE RANGE

Doing business on borrowed capital is known as "trading on the equity". Trading on the equity, however, includes all forms of doing business with funds (or properties) obtained on contracts calling for limited payments to those who supplied the funds, with the expectation of causing the funds to produce a larger revenue than called for by the limited payments.[1] The same idea applies when an individual is using leverage. A small amount of capital is used to do the work of a much larger amount. Margin is an example of leverage where the broker's money is used to make a larger profit. If 100 shares of a $100 stock on 50 per cent margin were purchased, half of the total cost of $10,000 would be put up by the purchaser and half would be borrowed from the broker. If the stock moves up 10 per cent to $110, the price rise is 10 per cent but the profit is 20 per cent based on the investors actual investment of $5000. The investor has more money working for him than he is actually investing.[2] The use of leverage does not quarantee a profit. It permits

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[1]Gilbert Harold, Corporation Finance (3rd ed. rev.; New York: Barnes and Noble, Inc, 1956), p.38.

[2]David Jenkins, The Power of Leverage (Larchmont, New York: Investors Intelligence, 1966), p.3.

a higher profit to be made with a specific amount of money. However if the stock price decreased to $90 this would be a price loss of 10 per cent but an investor loss of 20 per cent ($5000-$1000). The concept of leverage should only be attempted after all basic principles of investment have been applied.

Generally warrants are purchased because of the leverage factor. McCrory Corporation warrants sold at $2. and gave the right to buy one common share at $20 when the market price was $10. At these prices, the warrants command a $12 premium. However, if the McCrory common should rise 200 per cent to $30, then the warrants should rise in price at least five times and sell for at least $10. The warrants give the holder the right to purchase a $30 stock for $20.[1] This is a mathematical determination, and if the warrants sold for less than $10 investors would buy them, exercise the option, and sell the common stock for a profit.

An actual illustration of leverage in action. In 1956 General Tire and Rubber Corporation warrants selling at $4.50 entitled the holder to buy the common at $70. The market price was $50. Approximately a year later the common had risen 100 per cent, the warrants 767 per cent to $39.[2]

The number of shares which can be purchased with each

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[1]"Warrants: Hope for Sale", _Forbes_, January 15, 1964, pp.12-13.

[2]_Ibid_.

warrant is an important factor in warrant leverage. Most warrants are issued so they can be converted to one share of stock. Many warrants have been adjusted for stock splits and stock dividends resulting in increased leverage. As a result warrants with multi-share exercise rights, in addition to their basic leverage, are highly volatile and can provide large moves in either direction.

An example of high leverage in multi-share privilege warrants is visible in Martin Marietta warrants--exercisable at the rate of 2.73 shares of common stock at a total price of $45 for the package of 2.73 shares to Nov. 1, 1968.[1] On the upside the warrants will move approximately 2.73 points for every one point rise in the common stock.

The price movement of the common stock is reflected in the price of the warrants. To use a simple analogy, if there existed and option on a piece of property which gave the right to buy that property for $5000, and the option could be sold at will, then the value of the option would be determined by the current value of the property. If there were buyers willing to pay $10,000 for the property, the option would be worth at least $5000. If it were expected that in a few more years the value of the property would go up, the value of the option would be greater than $5000. This value above $5000 is a premium.

If the current market value of the property was $1000

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[1]Edwin R. Breitman, Sophisticated Approach to Stock Market Profits (Los Angeles, California: The Author, 1964), p. 77.

the option to buy it a $5000 would be worth much less than in the previous situation. Yet, the possibility that at some future time the property value may go up would give a certain value called a premium to the option.

This premium determines the market price of the warrant. The amount of the premium is determined by several factors. If the warrant is perpetual it will have a higher premium than one that expires next week. The price of the common stock relative to the exercise price is important. Even though the stock price is far below the exercise price, the warrant still has value and as the stock price rises toward the exercise price the warrant price will also rise. If the stock rises far above the exercise price, however the advantage of buying the warrant over buying the stock begins to disappear, the premium will decrease, and, if the stock price continues to rise, will vanish altogether.[1]

Table 2 is used to illustrate the many different situations in terms and premiums applicable to warrants. The current premium for the Alleghany Corp. illustrates a small premium for a warrant when the stock is selling considerably above its exercise price. The Atlas Corp. illustrates a large premium for a stock selling well below its exercise price. There are several stocks selling well below the exercise price with very high premiums. The market is not consistent in the premiums accorded warrants.

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[1] *Ibid.*, p.32.

TABLE 2

BIG BOARD STOCKS WITH WARRANTS*

	Recent Warrant	Range 1963-64	Recent Stock	Range 1963-64	Terms	Current Premium / Final Expiration
Alleghany Corp.	7	9 5/8-6	10½	13 -9 1/8	$3.75	$ 0.25 / perpetual
Atlas Corp.	1 3/8	1 3/4- 7/8	3¼	3 3/4-2 1/8	6.25	4.37 / perpetual
Martin Marietta	21 7/8	29 5/8-17 3/4	20	22 5/8-18	2.73 shs @ tot. $45 to 11/68	4.50 / 1968
McCrory Corp.	2½	5¼ - 1 7/8	11	17 3/4-9 7/8	$20 to 3/76	11.50 / 1976
Pacific Petroleums Ltd.	6	8 5/8- 5 5/8	11	14½ -10¼	$19 to 3/68	14.00 / 1968
Sperry Rand	9¼	10 3/8- 6 5/8	20 1/8	22 3/8-12 7/8	1.08 shs @ tot. of $28 to 9/67	14.37 / 1967

*Source: "Warrants: Hope for Sale," _Forbes_, January 15, 1964, pp. 12-13.

CHAPTER IV

SHORT SELLING, HEDGING, DILUTION, AND CONVERSION

The short sale is an unusual procedure in that the standard order of actions is reversed. In the usual transaction a purchase is made and then a sale is made. In the short sale, the sale is made first and then the purchase is made. In a short sale an individual sells stock he does not own in the hope that he may be able to purchase it at a lower price in the future. Exchange rules require delivery by a specified time and the broker of the short seller may lend stock or, if he does not have it, he may borrow it from another broker so delivery can be made.

Short selling is also done for hedging purposes. This is put into action when a stockholder has a larger holding of stock and fears a market decline. He prefers to hedge rather than trust his judgment. He therefore sells short the amount of stock he owns. If the market does fall, his gain on the short sale will offset his loss on his long position. If the market goes up, his gain on the long position will offset his loss on the short position.[1]

How do investors get top profits while protecting their capital? A small group known as the "hedge funds" are

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[1]George L. Leffler, The Stock Market, revised by Loring C. Farewell (New York: The Ronald Press Company, 1963), p.14.

resorting to short selling as part of an over-all strategy to get top profits and protect their capital. They are using leverage to get profits and the hedge to protect capital. Hedge funds operate by being either long or short and how aggressive they are varies with the fund. The primary intent is to create capital gains using leverage and selling short to offset some long postions.[1]

Warrants, as well as any other security selling on the market, can go down as well as up. Warrants are generally a fairly low cost security and investors see the potential for making money, due to stock rises, but do not seem to realize that if the stock goes down it is possible to lose. The fact that it has a low price causes them to forget their caution. The author demonstrated in Chapter III the possibility of a $2 warrant going to $10 with a large move in the common stock. If the common stock fell 50 per cent the warrant would probably fall 50 per cent also. However, if the warrant did go down to $1 the investor has a loss of 50 per cent of his funds. The risk is large in a volatile security. Therefore, to increase the safety margin and reduce risk thereby allowing a larger proportion of available capital to be utilized in warrants, one could sell the common short as a hedge against the long position of the warrants.

The McCrory warrants and common stock from Chapter III are utilized for this illustration. The warrants are priced

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[1]"Funds That Use Short-Sale Tactics," Business Week, April 2, 1966, p. 108.

at $2, the common at $10, and the following transations are completed:

Sell 100 shares of McCrory common short	cost	$1000
Buy 500 shares of McCrory warrants	cost	1000
Total Investment		$2000

The market goes down, for the illustration and the common goes to $5 a share. The warrant went down 50 per cent and is now selling for $1.

100 shares of McCrory common short		profit	$ 500
500 warrants of McCrory	long	loss	500
	Profit and loss		000

If the common goes down to $2.50 the warrant could be expected to go to $0.50.

100 shares of McCrory common short		profit	$ 250
500 warrants of McCrory	long	loss	250
	Profit and loss		000

The figures may not work out this close but these are reasonable estimates, and demonstrate that any loss would be relatively small.

Assume the common stock goes up to $30 and the warrant to $10.

100 shares of McCrory common short			
	30x100	value	$3000
500 warrants of McCrory	long		
	500x10	value	5000
	Profit		$2000

The safety of funds provided by hedge were the market

to go down was absolute. This permitted a profit to be made in a rising market. If the investor would assume some risk on the downside his profit could be higher.

When analyzing a security it is an excellent idea to determine if the warrant is protected against dilution. The possibility of dilution arises from stock splits, stock dividends, and mergers. As an illustration the Armour Corporation had warrants outstanding until 1964. The warrants were not fully protected against dilution and the Armour Corporation paid two 10 per cent stock dividends and did not adjust the warrants. A warrant would have been exercisable into 1.21 shares of common per warrant instead of the one for one basis unprotected. This, as stated previously, affects the leverage factor of the warrants.[1]

The expiration dates of warrants must be watched. When warrants have a long life ahead of them there is no reason to convert if they are selling for a premium and it would be cheaper to buy the common stock. The warrant is only used for capital appreciation. When the expiration date is drawing near and the common stock is selling for less than the exercise price the warrant value can only go down until it expires. The warrants, of course, would not be exercised. In the case of warrants whose common stock is trading above exercise price, thus giving the warrants a basic value, any premium will tend to shrink and then vanish as expiration

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[1]Edwin R. Breitman, Sophisticated Approach to Stock Market Profits (Los Angeles, California: The Author, 1946), p.77.

date approaches. In either case the expiration date must be watched closely.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

The common stock warrant is part of the capital structure of corporations. They are used, as are bonds and stocks, to raise money for the company. In addition they are used to compensate underwriters, promoters, company executives, and have been used in reorganizations.

The SEC restrictions against the issue of common stock warrants apply to gas and electric companies of interstate corporations. They have not accepted other securities such as income or convertible bonds.

Common stock warrants may turn in a spectacular performance. To share in the performance will require a great deal of effort. Preparation requires a knowledge of the market and how it operates and the ability and willingness to make an exhaustive study of each warrant in which a possible investment situation exists. Actually the performance of the common stock causes the warrant to move. Therefore, above everything else the common stock must be in a satisfactory situation. All possible methods of investment, hedges, etc., should be examined for the best possible way to handle this specific situation.

The companies which turn in the really spectacular performance, i.e. 4000 per cent price appreciation, are the

companies having penny warrants which look hopeless. There is no way to predict that the warrants of these companies will ever be of value.

The volatility of common stock warrants make them a speculative security. It is recommended that prior to investment a thorough study be made of the particular corporation.

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