# Project on monitoring company stock price

One of the most significant ways of understanding the financial health of a company is by taking note of the stock prices in a particular span of time. The most fundamental data that a financial consultancy provides to a company is the idea of the stock status. There are many reasons for which an idea of stocks is required for all those associated with the company on any front. These have been listed as follows:

Mergers and Acquisitions

Takeovers

Investment Banking

Employee Compensation

Credit Analysis

Financial Research

Portfolio Analysis

All the decisions that every company makes with respect to the above mentioned aspects are dependent on the stock prices of respective companies. This would also enhance a company to know whether a company which has been trading highly on the stock market, would still be dangerous to invest in or not. In fact, seasonal variations, monthly and weekly highs and lows are all determined by stock analysis of a given firm. It has its respective links with a number of other factors that are immanent to the company concerned about e.g.: intrinsic value and executive compensation. Rise and fall in stock prices to a large extent are responsible for determining the relations between the three mentioned aspects of business.

In this project, they have first been explained exclusively and then an idea can be drawn based on the relations between stock, intrinsic value and executive compensation. It is also beneficial to understand that these values have come to be more highly correlated after the adverse effects of recession. If we take intrinsic value for example, it also contains the intangible assets. These assets are dependent on the position of the firm which are determined by the stocks. Even, the executive compensation which encompasses the payment that is made to the executives in a number of manners which would be listed subsequently, to a large degree depends on the stock values. This can be seen from the fact that every company which was affected by recession had to bear the decrement in the employee compensation and also there were many who were asked to leave the company permanently as jobs had actually been destroyed. The interface therefore, which gives an idea of all these activities within a company is the stick value. This is an overview of the relation between stocks, intrinsic value and executive compensation. The rest will be discussed hereafter.

Stock Price

Stock in a business represents the amount put into to carry out the business by the founders. It provides a protection for the creditors of an industry as it is hard to withdraw to the loss of the creditors. Stock is different from the possessions and the possessions of a business which may vary in amount and cost. The stock of an industry is separated as shares. The total number of shares has to be revealed during the time of company development. A share's value is decided and declared, which depends on the full amount of investment made in the business. A share has an acknowledged cost, which is also known as the par value. The par value is smallest amount of money that a business can issue and can sell these shares for in several authorities and finally it is mentioned as the capital is the records of the business. The shares will not have the same amount of value in former jurisdictions. These stocks are known as non-par stock. Shares show the amount of ownership that particular individual has and an organization may state different type of privileges for different types of shares. An individual is issued a stock certificate to show that he owns these many numbers of shares. This stock certificate is a legal certificate which describes the number of shares they own and they also specify the par value.

Types of Stocks:

There are two types of socks

Common stock

The preferred stock

An individual having a common stock has the right to vote during the corporate decisions. Preferred stock does not have the voting right during the corporate decision but the individuals who have preferred stock are liable to receive some amount of the dividends before they are given to other share holders. Convertible preferred stock comes with an option for the share holders to change the preferred shares into a set number of common shares regularly after a prearranged day. When new equity issue is issued they have a different authorized clause. Some shares which are in the common stock division may not have the same voting rights. Else some shares here have separate rights specified for them and are issued to certain higher parties. Suppose if there are new issues which are not registered within the security governing body these issues may be stopped from resale for some period of time. Preferred stocks have a fixed return in their bonds and also regular stock selection privileges. The individual who has preference stock enjoys the preference while the dividend is paid over common stock and they also get preference during the time of bankruptcy more than common stock. A sock derivative is some monetary tool which has a price that depends on the amount of basic stock. The main stock derivatives are future and options. Stock futures are agreements where the consumer is long and stock option gives the options for the buyer such as when to buy or sell the stock. As far as issue of the stocks to the founders or the executives of a company is concerned, it most generally follows the common stock trend which comes with restricted stocks. So, one can say that once the company's stocks come into play, the executives who are associated with the company get a feeling of belongingness and hence are motivated to work with a greater zeal. This has been in many cases post recession. The reason for the same is that, the companies were running out of financial resources. As a result of this, they could not attract high stature employees with the existing cash that they were willing to offer. Hence, a number of companies stuck to the idea of luring the employees with stocks. This has proved to be successful in a number of organizations in large diversities.

Intrinsic Value

It is termed as the actual cost of the corporation or a benefit based on a fundamental observation of its actual value together with all facets of the industry, in provisions of both physical and insubstantial assets. The intrinsic value may change according to the present market conditions. Investors, who invest heavily, use a number of systematic tools to identify the intrinsic value of their security in expectation to find out where to invest to get the maximum amount of return according to the present market conditions.

For call options, this is the differentiation among the original stock and the strike price. But for the put options, this is the differentiation among the strike and the original stock price. In both the cases of puts as well as calls, intrinsic value becomes zero when the difference among the respective puts and calls values is negative.

Executive Compensation

In order to understand the relation between stock and executive compensation, it is important to first understand the concept of the latter. Executive compensation is referred to the total payment or the financial compensation that an employee or in this context, the executive officer receives from a company or a corporation. Every executive of a company would receive other benefits along with the basic salary which forms a part of its compensation. These have been mentioned as follows:

Short-term incentives

Long-term incentive

Employee benefits

Perquisites

Compensation protection

It is noteworthy that the executive compensation of the employees of a company has risen dramatically over the last couple of decades of innovation in almost every field. This has caused it to be amongst the most sought after issues before joining a company. Also, these issues are decided by the board of directors of a company.

A very important concept of vesting needs to be understood at this point in time. There are possibilities that a company executive is paid in cash and in company shares as well. So, vesting is the time where a recipient has the authority to exchange shares and realize its values. It could be either cliff vesting or graded vesting. In case of cliff vesting the entire amount in shares is realized at once and in case of graded vesting, this is done partially. This could be either uniform or non-uniform depending on the percentage of the shares exchanged.

There is another form of executive compensation which companies offer these days. It is termed as stock options. This form of compensation are said to align the interests of the shareholders with those of the CEOs. This is because stock options make sense only if they have a value that lies above the strike price. It makes an impact on the income statement of the company and its distribution is transparent with respect to all the shareholders. There are certain shortcomings in this form of compensation scheme. Whenever the CEO of a company wants, he can raise the stock price so as to cash the stock options. This can be adverse for the long-term health of a firm. Also, since the value of stock options s bound to rise with increased volatility, there are chances of corporate failure as a result. This needs to be checked by the company as well.

Another form of executive payment is by virtue of restricted stock. This refers to the stock that is given to the executives as compensation which can’t possibly be sold if the requisite conditions are not fulfilled. Also, this can’t be realized of its value if the stock price is the same as the market price. With a number of companies decreasing on the number of stock options, it is likely that the restricted stocks are bound to increase in number in times to come. Event his form of compensation has its own demerits. The major demerit is that companies are including benchmarks like earnings per share or financial targets amongst the conditions which the company has to meet before realizing the value of the stock. So, there are also other compensation schemes which have been deployed for the same reason.

In continuation with the compensation schemes, a company also has the option of giving tax issues. Generally, the compensation that is given to a company has a high individual tax rate as well. Therefore, if executives convert some part of their incomes in the form of long-term capital gain, they can have their tax treatment reduced of its rigor.

Relation between Stock Price and Intrinsic Value

As we have seen, the intrinsic value represents the actual value or the true value which includes every single aspect of a business that can range from tangible to intangible. Hence, this has been seen to be different from the market value. The idea is to analyse the stock price so that the true value of the investment exceeds the market value of the same.

It would be better to understand the relation between the intrinsic value and stock price, by first getting acknowledged to a few fundamental concepts about options and strike price along with stock price and then developing an understanding of the same.

Options can be defined as a type of derivative where a particular asset is agreed to be traded at a reference price (underlying) for a specified time period. This is irrespective of the rise and the fall in the stock price. It is either call or put type. When an option gives the right to buy an asset, it is termed as a call and when it gives the right to sell something it is called as a put. The specified price which has been mentioned as the reference price in this case that determines the price at which the trading is to take place, is termed as the strike price. There is a basic rule that is followed in terms of call and put type options. Under the specified time frame, if the buyer desires to have a transaction on the agreed asset, it would become obligatory for the seller to allow it to happen. Here, the freedom of the seller with respect to the asset is decreased to a large level. So, the seller has to be very sure, before classifying a particular ass as an option.

The above explanation puts one in a better position to understand the relationship between intrinsic value and stock price. As we have seen, for a call option, it is the difference between the stock price and the strike price. In case of a put option, it is the difference between the strike price and the stock price.

Therefore, one can see that intrinsic value to a large extent helps an investor or an analyst to make decisions with respect to both qualitative and quantitative analysis of a firm. For example, the stock price illustrates the current valuation of a firm and at the same time, intrinsic value helps to determine whether the business is worth more than this current valuation of the firm. This is the reason that the investors relate options with the stock price to determine the intrinsic value of a particular firm.

As far as getting to the quantitative aspects of the relation between stock prices and intrinsic value is concerned, it can be done by the following procedure:

Estimate the earnings per share of the firm (EPS)

Estimate the Price/Earnings (P/E ratio)

Develop a Value Anchor and a Value Range

The Earning per share of a company can be calculated by dividing the summation of profit after tax, depreciation and other non-cash charges by the number of equity shares of a company. Here depreciation has been included as it is generally not a real expenditure of the company. Following the calculation of Earnings per share, one can calculate the Price to Earnings ratio of the company. This determines the price that the investors are ready to pay as a function of the earnings per share. P/E ration can be calculated by the following methods:

Constant Growth Dividend Model

Cross Sectional Analysis

Historical Analysis

Constant Growth Dividend Model calculates the P/E ratio by the given formula:

Price earnings ratio = (Dividend payout ratio) / (Required return on equity - Expected growth rate in dividend)

Cross Sectional Analysis calculates the P/E ratio by the following formula:

Price-earnings ratio = A1 + A2 Growth rate in earning + A2 Dividend payout ratio + A3 Variability of earning + A4 Company size

Here A1, A2, A3 and A4 are cross-section regression co-efficient.

Historical Analysis takes the average of the past years' P/E ratios to calculate the estimated P/E ratio of the company. This is significant when a company has had very close P/E ratios in the past and therefore, the expected value is estimated to be approximately the same. The other methods that have been mentioned above should be taken into account when the market is volatile and better approximation is required in the calculation process.

Finally, the Value Anchor is required to be calculated. This can be done by calculating the product of EPS and P/E. This basically, gives the intrinsic value. Now, once the intrinsic value has been calculated, a company can further compare it with the stock price to determine whether to buy, hold or sell. If a company has to buy, then the intrinsic price should be more than the stock price. If it is almost equal, then the shareholder should hold and if it is less, he should buy. Generally, every analyst provides a range of values of the intrinsic value obtained by the above calculated value. This would counteract any error that had been taken into account for the same.

The following is an illustration for the same.

Let' say that intrinsic value has been calculated to be Rs. 34.3. Now, one can use an anchor value range of 8, hence the intrinsic value can range from 30 to 38.

So, the following conditions can be followed:

Here, market price represents the stock price of the company and as per the window that has been used for the intrinsic values; one can make the respective decisions. We can see that for values less than 30, it has been recommended to make a buy decision, for values between 30 and 38, it has been asked to keep a hold. This is because, the intrinsic value is almost as much as the stock value hence there would not be any benefit of making a trade and finally, for value more than 38, one can sell. It can be noted here that intrinsic value is the expected value; hence it can be used here in this context.

Relationship between Stock Price and Executive Compensation

It is very important to know the reason behind the use of stocks in executive compensation. There are many companies which are start-ups or do not have the capability to lure the employees with their present conditions. The reason for the same is that they do not have enough financial resources to offer to their employees. Under the conditions they go for equity or stocks so as to hire the employees to their satisfaction levels. There are a number of issues that are related to stock compensation. These can be classified under the headings of legal, accounting and tax issues. Hence, it is very important that before a company decides executive compensation in terms of stocks, a critical planning is done.

If a company offers a good price for the stocks that it offers as a part of the compensation, it is likely that the employees would remain for longer times with the company hence building the value of the company in the long run. As we have seen, executive compensation is done in the form of stock option. So, the executives here are not shareholders, but are option shareholders hence they do not have the right to enjoy the same powers or rights that the actual shareholders of the company have. So, as the sales of a company increase, the vesting of options (as explained in the former sections) accelerates. This in turn generates a larger degree of executive compensation for the employees. Also, of the employees at any time plan to leave the company, they would have a limited period to exercise the option which had been vested at the time of termination of tenure with the company. So, vesting of stock ceases as an employee leaves the company for any reason.

Also, a company can possibly use options of two types. They have been mentioned as under:

Incentive Stock Options (ISO)

Non-qualified Stock options (NQISO)

The difference between the two occurs in the form of their exercising. This is because; there is no tax when each of these options is issued. When, NQSQs are exercised, the executive is subject to an income tax on the difference between exercise price and the stock price on the date of exercise. In the case of ISOs, it is on the difference between the sales price and the exercise price.

As far as the case with the founders of the company is concerned, they demand that they should be given the right to voting and the other rights of the shareholders. So, they are aware of the fact that if the stock that is owned by a founder is forfeited, it can lead to a hiring replacement. This in turn motivates the founders to strive to maintain the value of the company and build it to higher levels as the case may be. This can also be taken care of as stated in the form of restricted stock. Here, a company has the rights to repurchase the stocks of the employee or a portion of it as deemed necessary, if the founder resigns. This right gets lapsed over time, and finally these stocks start to behave as the stock options themselves.

In case of stock options, a particular company issues the stocks of other companies, but in the case of restricted stock, it is of the same company. So, the voting rights and other stockholder rights are there with the restricted stock holders. The rights are all applicable under the banner of corporate law.

So, we can see that the two most common types of stock options that are offered to the executives are stock options and restricted stocks. They are different in nature, but they do have their say in the structuring of the compensation plan of the company. So, it is very important that every company makes proper use of the compensation plans in order to have better practices of hiring. Also, the stock prices determine the level of executive satisfaction with the company. It would work to a large in increasing the motivation of the employees at the same time increasing the retention time of the executives. These, as seen, could be either the new employees or the existing founders of the company in the long run.