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COMMON STOCK EVALUATION



The information provided in this *EBSOnlineArticle* will be valuable to you if you are, or intend to become an amateur player on the NYSE or any other stock market in the world. In this document we are going to focus on common stock valuation, because the stock markets are accessible to the ordinary man in the street and is also the most popular investment forum worldwide.

Let's start explaining the stock market. A stock market is also referred to as the Stock Exchange, and is a tangible physical building where listed companies' shares are traded. The prices of the various shares are fixed electronically and the price of a share is the direct result of the demand and supply of that specific stock at that given point in time. In order to explain the supply and demand of stocks and the resulting price, let's have look at a specific example:

THE ELECTRON STORY

Electron is a company that manufactures electronic equipment. Electron started as a private company. Because of the great demand for their product worldwide, they needed additional capital and decided to raise a portion of their expansion capital by going public and selling their shares on the NYSE. The NYSE has accepted them because they have qualified according to all the minimum criteria necessary to be listed on the NYSE. Electron's board of directors has decided to issue 20 million R1 shares that will then be sold on the stock exchange. The listing price will therefore be R 1 per share.

BUYING COMMON STOCK

Now, suppose you are an investor, and you are also interested in buying Electron shares, what are you willing to pay for them?

Before you could even start thinking of a possible price to pay for their shares, you will have to do some practical and common-sense research regarding all the detailed elements we are going to discuss in the following section. You will have to assess the growth potential for Electron, as a company, as well as the electronic equipment industry as a whole. You will have to analyze Electron's strategy to see what competitive advantages, if any, they have in the market. You will also have to assess their current profitability, as well as their future profitability prospects, and you will also have to know what Electron's competitors are up to. The importance of thorough research cannot be emphasized enough.

You'll have to develop an accurate picture of exactly what their proposed business venture involves.

ANALYZING THE COMPANY

As a **FIRST STEP**, we suggest that you assess the way the management of Electron has defined the scope of their business. Scope in terms of the products or services on offer; the technology involved and the geographic boundaries of their markets.

The Importance of Defining Your Business

The classic example of failure to understand the importance of this initial period of defining the parameters of the business is that of the American railway companies. By limiting themselves to the "railroads" business as opposed to the "Transport" business – a narrow view referred to as "Marketing Myopia" – they lost their competitive advantage to other developing modes of transport involving road and air travel.

Another example is that of the "Swiss" Watch Industry. When they woke up one morning, cheap digital watches had taken over their market. It was only when they had redefined their business as being in the "Jewelry Industry" that they could manage to recover their market share.

This important principle applies equally to new businesses and to multinational corporations. A mistake in defining the scope of a business can in some cases lead to immediate failure, or a short business life. Before setting goals and objectives, or formulating a business strategy, give careful thought to the scope of the business operation. You should assess for yourself if Electron's business definition is wide enough, but also focused enough.

Analyze Market Potential

Electron's services or products must have sufficient market potential. To get an idea of this, look at information sources provided by the industry. Approach customers to find out what their needs are, and what they think of Electron's products and services. You will also have to determine how favorably Electron's products and services compare with those of the opposition. You should also ask distributors and all other parties dealing with the company for their opinions.

Study the Competitive Environment

Look at those factors that make the difference between success and failure in their particular line of business. Analyze the industry carefully and shortlist the factors which might make one competitor more or less successful than another. These factors would include, for instance, market share, barriers to entry, capital requirements, and the satisfaction of customers needs.

Many factors will determine competitive advantage. You could offer better technology, packaging, quality, or price. On the other hand, the product could succeed by appealing to social or psychological values through clever marketing. Efficient, friendly service is one way to gain a competitive advantage and have customers coming back, even if your prices and products are similar to your competitors'.

Carefully examine their products or services in the light of their strengths and weaknesses,

compared with others on the market. Look at how it will stand against major opportunities and threats in the market. Evaluate the nature of the product, distribution networks, and manufacturing processes. Technological changes, and political developments, particularly change in laws.

Socio-political changes may also give you clues to competitive advantage. This whole process so far is known as a situation analysis. At this stage, limit your assessment to those crucial factors that really make the difference between success and failure.

Try to predict future advantages and disadvantages based on the opportunities and threats that exist in the market place.

In the case of a manufacturing business, like Electron, access to RAW MATERIALS, availability and quality of labor, and transport costs will be very important.

Is Electron's manufacturing process not susceptible to rapid changes in technology?

Assess whether Electron is too heavily reliant on one market. Companies that relied too heavily on trade with Thailand and South Korea, for example, had difficulties after those previously strong economies collapsed in 1997. The key is to diversify your trading partners and the regions of the world where you invest your money. The New York Stock Exchange Journal advises Americans to invest at least a quarter of their savings in foreign markets. Do they choose a mix of activities that will reduce their vulnerability to economic cycles? Do they structure their financial resources to reduce the danger of interest rate fluctuations?

Is Electron first on the market, are they enjoying first mover advantages? By being first on the market, a business has time to establish product brand identification and consumer loyalty. By being the first to introduce an existing product in a new class, size or range, or the first to bring in new product features, the business enjoys the same initial benefits as being first on the market.

Competitive Edge through correct pricing by Electron

Better-cost positions can often be reached through economies of scale, by increasing the size of operations; or perhaps through vertical integration by controlling the ownership of raw material, distribution outlets, or other resources, or by rationalization of product lines, by reducing the number and variety of products offered; or by developing a degree of interchangeability between components.

Competitive Edge through Correct Financial Structuring by Electron

Aggressive financial structuring through high gearing (borrowings), or the willingness to take greater financial risks, can enable Electron to lower profit margins and, in turn, prices, without reducing their profitability in terms of the return on their equity. (Return on equity is the net income or profit after interest and tax have been deducted, and is expressed as a percentage of the shareholders' capital.)

Competitive Edge through Electron's Service

There are also less tangible ways of developing a competitive advantage and these usually involve better service to the customer. This attitude towards the customer should be consistent; it must be evident at management level as well as among employees.

Competitive Edge through Electron's Skilled Management Team

The management team of Electron is surely the single most important factor for estimating future growth and profitability potential. What to look for:

Firstly one should analyze the CEO. Look at his/her qualifications, experience and track record. Another very important element to consider is his/her personality – negative personality traits to look for are arrogance, personal ego and competitiveness.

Competitive Edge through Electron's Effective Strategy

Analyze Electron's vision and mission statements to determine if they are synchronized with the realities of the business environment.

At this stage, you should also be in a position to measure the potential success of Electron's strategy. Will their strategy give them a competitive advantage over their competitors? Remember that a competitive advantage is only real if it is perceived by the customer to be to his or her benefit. This is such an important aspect, that I am going to repeat it – A competitive advantage only means something if it is perceived by the customer as being to his/her advantage. You should also ask whether Electron's current competitive advantages would be sustainable in future. You should know what the company intends to do if this is not the case.

Electron's Financial Statements

Analyze the financial statements of last three years. The income statement will give you a picture of growth in the latest financial year. The balance sheet tells the story from the beginning up to now. The cash flow statement will tell you if Electron's cash flow is healthy – the most critical factor!

To Summarize

- List all the critical factors for success
- Analyze the situation by;
 - listing Electron's strengths and weaknesses in comparison with their competitors, and
 - listing all the obvious market opportunities and threats.
- List all the competitive advantages and disadvantages, both present and potential.
- List ways of how Electron is exploiting existing competitive advantages and minimizing disadvantages, both now and in the future.

You have now done your analysis on the company whose stock you want to buy. You are now in the position to estimate likely future profits. The estimation of future profits is the whole aim of this exercise. Future profits are the basis from which future dividend Payouts can be determined. Future dividends, as you will see in the next section, are the main ingredient in the price determination exercise of shares by stock analyses.

The Market Value of a Share

Stock prices are calculated by determining the present value of an infinite stream of yearly dividends. In other words, the value of Electron's shares is in fact the sum of all the dividends that you expect from these shares, as if your intention is to keep them forever. For example, if you expect that the dividends you are going to receive from an Electron share, are the following amounts:

Year 1: R 0,20

Year 2: R 0,21

Year 3: R 0,22

Year 4: R 0,23

Year 5: R0,24

then the value of the share should be:

$$R_{0,20} + R_{0,21} + R_{0,22} + R_{0,23} + R_{0,34} + x = \$y$$

As you will realize, the calculation is slightly more complicated, because the value of $R_{0,20}$ in the second year is less than the $R_{0,20}$ in the first year, because of the time value of money. The actual rate to use in the calculation of the present value of that future dividend stream, is relative and linked to the risk involved, because if you invest in shares, the return you are expecting on your investment, is higher than interest from a bank, or other low-risk investments. The third difficulty is the fact that you do not know for how many years you will receive these dividends.

THE GORDON MODEL

But luckily, there is an easy answer to these problems, thanks to a Mr. Myron. J. Gordon. He won a Nobel Prize for developing the now famous Gordon Model. The Gordon Model is easy to use and common stock analysts worldwide use this tool to determine the value of shares.

Here is the magic formula:

$$P_0 = D_1 / (K_s - g)$$

In this formula,

* P_0 is your expected value of the Electron share.

* D_1 is the dividend you are expecting after one year. (You have to make a calculated guess based on the analysis you did at the beginning.)

* K_s is the rate of return you want from your Electron shares. (This rate of return will be a function of the risk involved in shares in general as an investment, as well as the specific risk of Electron as a share. Again you will have to make a calculated guess when you determine the value of K_s .)

* g is the growth rate that you are expecting on the dividends received from your Electron shares. (To determine g , you'll also have to rely on your "gut feel;" and the information from your analysis)

THE GORDON MODEL IN PRACTICE

STEP ONE: determine the value of D_1 . The starting point here will be the value of D_0 or the most recent dividend that has been declared by Electron. Study the income statement and balance sheet to see what the retained earnings were. (Retained earnings are that portion of the profits that the company made but which are invested in new or new projects to repay debts or to pay interest.) For example, if a large amount of the retained earnings was used to finance projects with

short-term returns, chances are that the value of D_1 will be much bigger than the value of D_0 . If projects with longer-term results were financed, g will be relatively high, etc. (Also see our Products A - Z on "The Analysis of Financial Statements" for more info.)

STEP TWO: the determination of K_s . This rate will be based on a fairly risk-free investment, like an investment in Government stocks, or an investment in a bank, as well as on the relative risk of the share. For example, if this relative risk-free rate is 10% per annum and you perceive the stock market to be risky and you also see Electron as a risky share, your K_s value would be in the range of 15 - 20%. Do you get the drift now?

It should be very clear to you at this stage that the critical information used in your valuation of Electron's shares is derived from your analysis, as described in the first part of this document. But you also now know that using your "gut feel" was inevitable. The values of the next year's dividend (D_1), the growth of future dividends (g) and the expected rate (K_s) are all estimates, based on your intuition or "gut feel". (Also see the document on "How to develop your "Gut Feel".)

The Gordon Model - The Value of a Share

In order to determine the value of an Electron share, let's assume that $K_s = 17\%$; $D_1 = R_{0,20}$ and $g = 5\%$. Your value of an Electron share P_0 is then:

$$P_0 = 0,20 / (0,17 - 0,05)$$

$$P_0 = 0,20 / 0,12$$

$$P_0 = R_{1,67}$$

If your analysis is correct, Electron's shares, launched on the market at R_1 per share, will move up to $R_{1,67}$. If you could therefore buy shares at the listed price of R_1 , you could make a healthy profit if you sell them after the listing.

A WORD OF ADVICE

Notice that the perceived value of an Electron share will be determined by the valuations of thousands of other investors as well. It works exactly like the price-fixing mechanism inherent to any auction. In fixing the market price of a share, there are basically three major forces in play.

The forces in play

* The perceived value as determined by all the investors.

* The supply of shares on the market. This is determined by the total number of shares

issued as well as the number of shareholders willing to sell these shares.

* The demand for Electron shares. This is determined by the buying power of investors on the stock exchange, as well as their willingness to buy Electron shares, relative to other shares on offer.

You may not be an expert yet but you are getting there!

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