



Literature – How a Company's Share Price is Determined

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Generally speaking, the stock market is driven by supply and demand, much like any market. When a stock is sold, a buyer and seller exchange money for share ownership. The price for which the stock is purchased becomes the new market price. When a second share is sold, this price becomes the newest market price, etc.

The more demand for a stock, the higher it drives the price and vice versa. So while in theory, a stock's initial public offering (IPO) is at a price equal to the value of its expected future dividend payments, the stock's price fluctuates based on supply and demand. Many market forces contribute to supply and demand, and therefore to a company's stock price.

1. Key Takeaways

- Stock prices are meant to reflect the present value of a corporation's future cash flows and profits.
- As such, it is possible to price a company's shares at some sort of fair value, even when prices at any moment are driven by supply and demand in the market.
- Several stock valuation models exist, such as the dividend discount model or Gordon growth model.
- While a stock price is conceptually determined by its expected future dividends, many companies do not distribute dividends.
- Stocks that don't pay dividends can be valued based on a multiples approach or relative basis.

2. Company Value and Company Share Price

Understanding the law of supply and demand is easy, while understanding demand can be more challenging. The price movement of a stock indicates what investors feel a company is worth, but how do they determine what it's worth.? One factor, certainly, is its current earnings and how much profit it makes.

However, investors often look beyond the numbers. That is to say, the price of a stock doesn't only reflect a company's current value, it also reflects the prospects for a company, the growth that investors expect of it in the future.

3. Predicting a Company's Share Price

There are quantitative techniques and formulas used to predict the price of a company's shares. Called 'Dividend Discount Models' (DDM's), which are based on the concept that a stock's current price equals the sum total of all its future dividend payments when discounted back to their present value.



By determining a company's share by the sum total of its expected future dividends, dividend discount models use the theory of the 'Time Value of Money' (TVM).

In addition to dividends, other valuation methods rely on factors such as the P/E (price-to-earnings) or P/S (price-to-sales) multiples on a relative basis. If one automaker has a P/E multiple of 20x and the industry average is 30x among all automakers, it may be undervalued. 'Discounted Cash Flow' (DCF) analysis is another approach that considers the future cash flows of a business.

4. The Gordon Growth Model

Several different types of dividend discount models exist. One of the most popular, due to its straightforwardness, is the Gordon growth model. Developed in the 1960s by U.S. economist Myron Gordon, the equation for the Gordon growth model is represented by the following:

Present value of stock = (dividend per share) / (discount rate - growth rate)

Or, as an equation:

$$P = \frac{D_1}{r - g}$$

where

- P = Current Stock Price
- D₁ = Value of the next year's dividends
- r = Constant cost of equity capital for that company (or rate of return)
- g = Constant growth rate in perpetuity expected for the dividends

5. Example of Share Price Valuation (using US Dollar)

For example, say Widget Inc. stock is trading at \$100 per share. This company requires a 5% minimum rate of return (r) and currently pays a \$2 dividend per share (D₁), which is expected to increase by 3% annually (g).

The intrinsic value (p) of the stock is calculated as:

$$\$2 / (0.05 - 0.03) = \$100.$$

According to the Gordon Growth Model, the shares are correctly valued at their intrinsic level. If they were trading at, say \$125 per share, they'd be overvalued by 25%; if they were trading at \$90, they'd be undervalued by \$10 (and a buying opportunity to value investors who seek out such stocks).

6. Drawbacks of the Gordon Growth Model

While useful in theory, there are some drawbacks of dividend discount models like the Gordon Growth Model.



First, the model assumes a constant rate of growth in dividends per share paid by a company. In reality, many companies vary their dividend rates based on the business cycle, the state of the economy, and in response to unexpected financial difficulties or successes.

Another problem is estimating the appropriate discount rate (minimum rate of return). If the required rate of return turns out to be lower than the dividend growth rate, the result would be negative (i.e., meaningless). Similarly, if the required rate of return is equal to the dividend growth rate, you would have to divide by zero (which is impossible).

Finally, as mentioned above, these models are only useful for valuing dividend-paying stocks. Many companies, especially growth companies or those in the technology sector, do not pay dividends.

7. What Factors Affect Share Price.?

Shares are priced based on expectations of future growth and profitability for a company. If those expectations are dashed, share prices can fall. One way to estimate this growth is by looking at the dividends a company pays to its shareholders, which represent profitability. Other factors to look at will include a company's future cash flows, its level of debt, and the amount of liquidity it has on hand. These are examined to see if a company can meet both its long-term and short-term obligations.

8. What Is Share Price.?

Share price refers to the value of a company's stock. The total value of a publicly traded company is called its market capitalisation (or 'market cap'), which is determined by adding up the value of all of the stock outstanding. The more shares that a company has outstanding, the lower each share will be given the same overall value of the corporation.

9. What Is a Good Share Price.?

A share price reflects the value of a company. A highly priced share may represent a valuable company, but if there are not many shares outstanding, it may not always be the case. Sometimes, the share price rises high enough that a firm's management decides to undergo a stock split, reducing the price of the shares by increasing the number of shares outstanding. A very low share price can signal that a company is struggling. These so-called penny stocks can be highly volatile and risky for investors.

10. In Conclusion

The Gordon Growth Model equation above treats a stock's present value similarly to perpetuity, which refers to a constant stream of identical cash flows for an infinite amount of time with no end date. Of course, in real life, companies may not maintain the same growth rate year after year, and their stock dividends may not increase at a constant rate, however to begin with a share price for a company, the Gordon Growth Model is certainly a beginning.