

The Valuation of Wal-Mart

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In fiscal year 2010, Wal-Mart stock sold for a 52-week high of \$55.01 and a 52-week low of \$46.42. Stock in the company was regularly recommended as a “buy” or a “hold” by analysts, according to Bloomberg L. P. However, with dividend payment of only \$1.09 per share on earnings of \$3.72, a payout of only 29%, far lower than the industry payout rate at maturity of 45%. The result of this low dividend payout has Sabrina Gupta, a stock analyst, reevaluating the actual value of Wal-Mart stock as a recommendation to new or existing clients.

Wal-Mart was built to save people money and make their lives better. Its business model has made Wal-Mart dominant. It beats out its competitors by offering a variety of products for competitive prices. It consistently plans expansion into metropolitan and international areas. Wal-Mart focuses on cutting their expenses at a rate that exceeds revenue growth so income will grow faster than revenue. The returns are distributed to the company’s investors. Wal-Mart has paid out dividends since its first stock offering in 1974, payouts ranged from 5.6% in 1974 to 29.3% in 2010. Over the last eight years, the payout percentage increased 12.5%.

### **Analysis**

In the previous four years, the Wal-Mart stock continued to grow and fare well in the market. Since 1974, Wal-Mart’s annual earnings gained an average of 25% yearly, although growth has slowed to between 5.8% and 16.4% in recent years indicating a mature company. Based on this continued growth and Wal-Mart’s continued reinvestment strategy, Ms. Gupta should pitch this stock to all her customers – long-term, short-term, dividend investors. Using the NASDAQ Dozen method, analysis conducted, with information available to Ms. Gupta, of the Wal-Mart stock in 2010 shows that the stock was a good buy for the majority of investors.

Specifically, Ms. Gupta's analysis should have recommended Wal-Mart as a buy to both holding and new investors.

A low risk stock that has consistently beat the market, Wal-Mart stock offers investors the opportunity to profit from its growth and expansion. The fundamental health of stock is determined by looking at revenue, earnings per share (EPS), and return on equity (ROE). See Table 1. Comparing annual totals for the three years preceding Ms. Gupta's analysis, Wal-Mart receives a PASS for revenue because of its consistent increasing revenue from 2008-2010. Increasing revenue shows consistent company growth, which is a good sign for the company and its investors.

Second, comparing EPS for the same period also shows an increasing amount of revenue is flowing back into the shareholder's pockets. The EPS increased 20% over the three years of Ms. Gupta's analysis. Walmart also receives a PASS for EPS. Finally, the ROE shows company efficiency, indicating very similar numbers from 2008-2010 at ~20%. Although the company and its investors would prefer an increasing ROE, a stable one shows that management is producing consistent returns for the owners of the company. Wal-Mart receives a PASS for ROE.

Table 1

*Wal-Mart Financial Information*

	2010	2009	2008
<b>Revenue</b>	408,124m	404,374m	377,023m
<b>EPS</b>	3.72	3.35	3.16
<b>Dividends</b>	1.09	0.95	0.88

<b>ROE</b>	21.08	20.63	20.18
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(Zahedi, 2011)

Wal-Mart’s historical data, between 2008 and 2010, shows the company is healthy and growing. After looking at the health, Ms. Gupta should have looked at other professional opinions for the stock during her analysis period. Out of 27 analysts, more than half of them recommended Wal-Mart stock as a buy or strong buy, and only one indicated selling the stock. See figure 1.

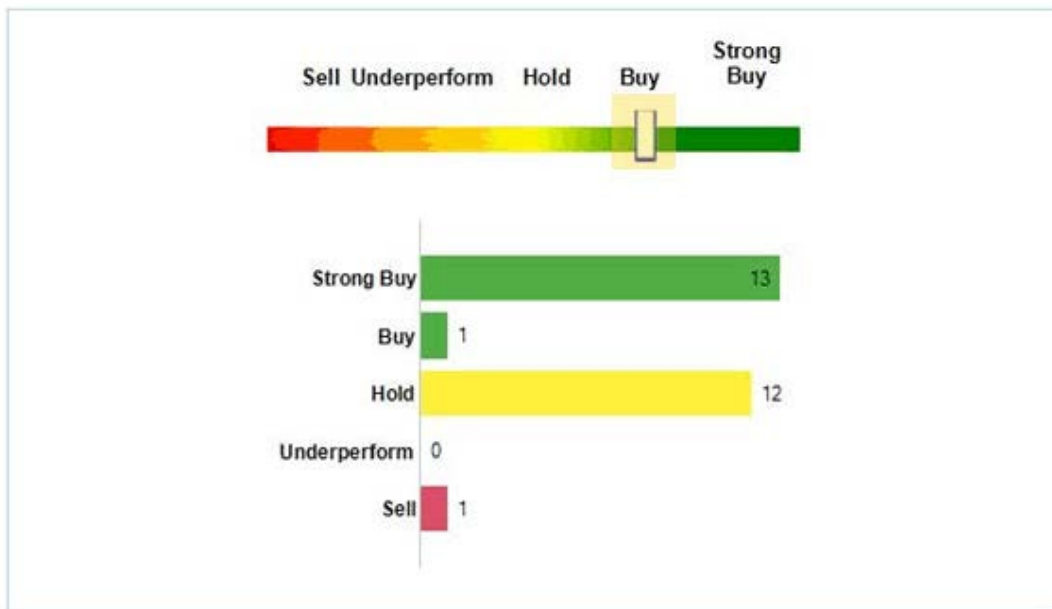


Figure 1. Recommendation for Wal-Mart Stock in 2010. (NASDAQ, 2014)

Next analysis should look for a stock’s chances at positive earnings surprises. Unfortunately, this is where short-term or low volume investors would not win anything but impatience. Although, the stock did not lose any value per share it also did not gain. Despite forecasting for positive earnings, the stock did not make any positive gains in 2010. The stock opened near \$54 and closed at the nearly same price. Its earnings surprise results does give the

stock a FAIL because of its erratic earnings surprises in 2010. It did however; beat its market estimate by \$1.12 per share (Walmart, 2010).

Similarly, when you look at Wal-Mart's earnings forecast for 2008-2010, you can see that it failed to meet its forecasts, and its EPS dropped from \$3.20 to \$.99 during that period, with a significant drop particularly in 2010. Its valuation scores a FAIL for its performance in 2010. As unexpected as this drop in earnings was, the overall stock serves long-term investors better than the short-term investor. Earnings growth beat the S&P 500 between 2008 and 2010. 0, -80, 100.

### **Valuation**

The case offers multiple alternative methods to reach the projected stock valuation for Wal-Mart. The methods that this case will utilize is the dividend discount model, the Capital Asset Pricing Model (CAPM), and the P/E multiples. We will utilize these methods in order to obtain a valuation of Wal-Mart in order to offer suggested courses of action.

#### **Dividend discount model (DDM)**

In the dividend discount model (DDM), the stock is valued by using the predicted dividends and discounting them back to the present value. If the DDM valuation is higher than the market price for the share, the stock is undervalued. The formula is:

Value of Stock = Dividend per share / (Discount rate – Dividend growth rate) or

$$P = D / (K_e - g)$$

In the information provided in the case, the dividend growth rate, expected dividend, and investor's required rate of return are known. A respected analyst has set the perpetual dividend growth rate (g) at 5%. The dividend (D) for 2011 is \$1.21. To determine the required rate of return (K<sub>e</sub>), we use CAPM. We will need the following assumptions that were provided in the case:

Risk free rate: 3.68%

Beta of Wal-Mart: 0.66

Market risk premium: 5.05%

$$K_e = R_f + (\beta * \text{Market premium})$$

$$= .0368 + (.66 * .0505)$$

$$= .0701$$

$$= 7.01\%$$

With this information we can calculate the value of the stock.

$$P = D / (K_e - g)$$

$$= 1.21 / (.0701 - .05)$$

$$= \$60.11$$

Under the DDM model, the stock of Wal-Mart should be valued at \$60.11. Since the last closing price of the stock was \$53.48, the stock is undervalued.

### **P/E Multiples**

Price to earnings multiples or ratios show how much an investor is willing to pay for \$1 of earnings. Wal-Mart's trailing P/E ratio (using earnings per share from the last four quarters) is 14.7. This means that Wal-Mart investors are willing to pay \$14.70 for \$1 in earnings. Wal-Mart's leading P/E ratio (based on earnings estimates for the next four quarters) is 13.4. We will utilize both multiples in order to get a complete analysis of the valuation. The formula for the P/E multiples is that P/E equals market share price (p) divided by EPS. Earnings per share was an assumption from the model and was listed at \$3.72. Therefore, in order to find the price valuation we can extrapolate the following formula:

$$\text{Price} = \text{P/E ratio} * \text{EPS}$$

For the trailing P/E ratio:

$$P = 14.7 * \$3.72$$

$$P = \$54.69$$

For the leading P/E ratio:

$$P = 13.4 * \$3.72$$

$$P = \$49.85$$

When utilizing the trailing P/E ratio, the Wal-Mart stock appears to be slightly undervalued. However, when using the leading P/E ratio, the stock appears to be overvalued. This makes this valuation method inconclusive.

There are certain considerations when dealing with the valuation models laid out above. With the DDM, the valuation method doesn't work if the company does not pay dividends. With the P/E ratio, the earning per share (EPS) is based on accounting conventions related to a determination of earnings that is susceptible to assumptions, interpretations and management manipulation (Investopedia, 2015). This means that the quality of the P/E ratio is only as good as the quality of the underlying earnings number (Investopedia, 2015).

With the information available in 2010, the recommendation would be to hold the stock for those that already own it, but we cannot recommend buying the stock because the leading P/E multiple valuation shows that the price was overvalued. Though the DDM shows the stock price as slightly undervalued, the margin is not great enough to overcome the risk associated with the leading P/E multiple.

Based on the overall analysis and evaluations conducted on the model, we recommend that Ms. Gupta take each investor in her portfolio and evaluate for risk aversion. The stock price has continued to increase in value overall, but in the preceding years has slowed to its now mature levels. This would be a very good stock for an investor to hold on to for several years for stable growth and low risk. Investors who allow for an increase in risk, the pay back may not be enough of an incentive, but would help round out and balance a portfolio if the stock is already held.



## References

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