

Monster, Coca-Cola, And Pepsi Investment Prospect Analysis

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Abstract. In the business world, an investor needs to decide which company is better to invest in in the same industry. In the beverages industry, there are a large number of companies which means it is hard to choose the best company to invest in. Therefore, this research compared three companies in the beverages industry, Coca-Cola, Pepsi, and Monster, to find out which company is not advised to invest. As stated by Templin in the Method of Investment analysis, investment analysis is the analysis of the financial information of a company to make investment decisions. There are four basic approaches to investment analysis, fundamental analysis, technical analysis, quantitative analysis, and behavioral analysis. This research collected financial information from the three companies and used financial formulas in order to calculate the business risk of each company to find out a company which has the highest business risk. the research found that Monster had the highest business risk while the other two have a lot lesser business risk compared to the monster. Overall Monster is not advised to invest, and the other two companies can be considered.

Keywords: Beverage industry, Investment decision, Company value, Equity beta, WACC.

1. Introduction

All companies in the world are designed for any industry, large or small, and when investors want to turn their money into more money, then those investors need to consider whether the company can help them achieve that goal. Investors can tell directly whether a company is only worth investing in by looking at the earnings report to see if it is profitable or not. There are many ways to determine whether a company is worth investing in. However, many of these methods are complex for the average investor without much expertise. This article teaches the average investor which company is more worthy of investment by comparing the values calculated by leverage ratio, the weighted average cost of capital and equity beta, based on two large beverage companies and one smaller beverage company.

The research is the study of the global value chain of the Coca-Cola system. Mention an introduction to global value chains in research. The research presents Coca-Cola company history, profile, the Coca-Cola company system, Coca-Cola company SWOT analysis, and comparison with PepsiCo. The final part examines the challenges faced by the major global anchor bottlers facing Coca-Cola bottling plants. Coca-Cola's new plan brings better results for the company [1]. Pepsi-Cola has more market penetration and has a strong brand effect. PepsiCo continues to develop in various fields to meet the continuous development of demand. Pepsi still faces threats from Coca-Cola. PepsiCo has good earnings numbers. PepsiCo is actively expanding overseas markets. PepsiCo had operational success in 2019. PepsiCo may be at risk of a cash crunch as a result of its massive financing. PepsiCo has a good debt repayment ability. PepsiCo has the possibility of overstocking. In the end, PepsiCo's earnings are still reliable [2]. Pepsi and Coca-Cola compete in the industry. Coca-Cola was liked by more people in the test. Most people think that Coca-Cola has a better taste than Pepsi. Price is a very important influence on people's choice of Coke brand. TV commercials are also an important factor for Coke consumers to choose a brand. Finally, there is no association between Coca-Cola or Pepsi and gender [3].

The study is conducted on three different scales selected from the global beverage market. The purpose is to explore the direction worth investing in the global beverage industry.

2. Method

There are multiple perspectives and methods to determine whether a company should be invested in or not. Firstly, business risk can help determine which company is more worthy of investment or whether the company is worthy of investment. The term business risk refers to the exposure a company or organization has to factors that may lower its profits or result in bankruptcy. In an analysis of business risk, Amit, Raphael, and Birger Werner felt found low business risk allows companies to obtain factors of production at a lower cost and operate more efficiently. There is no doubt that if a company has low business risk accompanied by high profits and can be run effectively all the time, then it is a good investment for the investor, who will receive a high return. For some ordinary investors, calculating the business risk may be a problem. Now for a step-by-step analysis of how to calculate business risks. First of all, investors figure out leverage and debt-to-equity ratio, the formula for leverage and debt-to-equity ratio is [4,5]:

$$\text{Leverage} = \frac{\text{TotalDebt}}{\text{Equity}} \quad (1)$$

Leverage is the total debt divided by the Market Value of Equity. After that, investors need to find out the equity beta and marginal corporate tax rate. Madhuri Thakur in the article equity beta defines equity beta as a measure of the volatility of a stock to the market, i.e., the sensitivity of the stock prices to changes in the overall market. Then, investors can use the CAPM model to calculate the asset beta and the formula is:

$$\bar{r}_a = r_f + \beta_a(r_m - r_f) \quad (2)$$

Where Exp Rate of Return on Stock = Risk-free rate + Asset beta (Market rate – Risk-free rate) [6]. Investors can also look for marginal corporate tax rate figures in several earnings reports. Finally, using the formula to calculate business risk, Equity Beta= Asset Beta / [1- Tax Rate * Leverage) (1- Leverage)] [7]:

$$\beta_e = \frac{\beta_a}{[1 - TL)(1 - L)]} \quad (3)$$

3. Results

3.1 Leverage Ratio Analysis

First of all, the leverage ratio will be analyzed. total debt and equity from each firm's financial report in TTM. Then we use total debt divided by equity and get MNST's Leverage as 01%, PEP's leverage is 16.2%, and KO's leverage is 15.2%.

Table 1. Leverage Ration Analysis

	Total Debt	Market Value of Equity	Leverage Ratio
MNST	6,010	46,150,000	0.1%
PEP	40,334,000	248,860,000	16.2%
KO	42,761,000	281,230,000	15.2%

The leverage ratio is data that shows the degree of borrowing money in a firm. PEP and KO have similar leverage in TTM, but MNST is 0.1% which is dramatically less than the other two firms. Meanwhile, table 1 shows that MNST's debt is the reason for the lowest leverage ratio. Monster is

the youngest firm and has a limited product line, which greatly determines Monster beverage is a small company. Therefore, the bank probably considers the risk of lending money to Monster beverage. Meanwhile, less financial support stands for fewer extension opportunities.

3.2 Weighted Average Cost of Capital (WACC)

Before analyzing the weighted average cost of capital, marginal tax is important data as well, which can affect WACC and the company's tax shield [8,9]. Then Income before tax and Income Tax Expense data from each firm's financial reports are in TTM.

Table 2. Weighted Average Cost of Capital Calculation

	Income Tax Expense	Income before Tax	Marginal Tax Rate	E/V	D/V	Cost of Equity	Cost of Debt	WACC
MNST	393,462	1,619,544	24.30%	0.91	0.09	3.50%	3.30%	3.01%
PEP	2,330,000	11,633,000	20.00%	0.90	0.10	3.56%	4.10%	3.58%
KO	2,168,000	11,786,000	18.30%	0.91	0.09	3.56%	4.60%	3.53%

$$WACC = \left(\frac{E}{V} \cdot R_e\right) + \left(\frac{D}{V} \cdot R_d \cdot (1 - T_c)\right) \quad (4)$$

R_e is the cost of equity, R_d = Cost of Debt, T_c = Marginal Tax Rate. Then marginal corporate tax rate can be calculated by using the formula income tax expense divided by income before tax. As the table shows, MNST's marginal tax rate is 24.30%, PEP's marginal tax rate is 20.00%, and KO's marginal tax rate is 18.30%. Secondly, the marginal tax rate is used to calculate the weighted average cost of capital, which is a common way to determine the required rate of return. After acquiring the market value of equity, the market value of debt, cost of equity and cost of debt from financial reports. As the table shown that three firms' WACC shows high similarity. MNST's WACC is 3.57%, KO's WACC is 3.58%, and PEP's WACC is 3.53%. Generally speaking, lower WACC indicates a healthy business to attract investment because of its lower cost, which means MNST, KO and PEP have similar attractiveness to investors.

3.3 Equity Beta

For the next step, this article explores if these three firms are at equal risk to invest in each firm. Then found a huge difference in equity beta between MNST and KO and PEP. Equity beta is data measuring the volatility of the stock to the market. Importing each firm's asset beta from each financial report, which shows MNST's asset beta is 0.93, PEP's asset beta is 0.57, and KO's asset beta is 0.56. Then using the equity beta formula to get MNST's equity beta is 0.93, PEP's equity beta is 0.50, and KO's equity beta is 0.50.

Table 3. Equity Beta calculation

	Leverage Ratio (D/E)	Asset Beta	Tax Rate	Equity Beta
MNST	0.1%	0.93	24.30%	0.93
PEP	16.2%	0.57	20.00%	0.50
KO	15.2%	0.56	18.30%	0.50

$$\beta_e = \frac{\beta_a}{[(1 - T_L)(1 - L)]} \quad (5)$$

Where T is the Marginal Tax Rate, L means Leverage. Depending on the data shown, MNST's stock possesses the highest volatility. KO and PEP possess lower volatility which means their stocks are stabler than MNST's. Combined with data from WACC and data from Equity beta, KO is the best

stock for investors among MNST, KO, and PEP. The reason is KO have stable market performance while the three stock have a similar required rate of return.

4. Discussion

There are some reasons why the calculated results show that Monster has a higher beta compared to the other two companies.

The first reason is the external business environment, like inflation. For example, in China Pepsi and Coca-Cola sell for around 3 RMB, but Monster sells for around 5 RMB. Monster sells for a higher price compared to Pepsi and Coca-Cola. Therefore, Monster may lose more consumers which means the business risk will be greater than Coca-Cola and Pepsi. If there is inflation, the price of Monster will only be higher, and the business risk will increase. Therefore, if the world's economy is in inflation, it is better to choose to invest in Pepsi or Coca-Cola instead of Monster.

Secondly, there are also business risks due to the Covid-19 epidemic, such as a lack of supply of raw materials due to inconvenient transportation and so on. Because Monster is smaller than Pepsi and Coca-Cola, Monster is exposed to higher business risks than Pepsi and Coca-Cola. So, it is better to invest in Pepsi and Coca-Cola instead of Monster.

The third reason is their product category, Monster mainly focus on selling functional beverage, while the other two companies focus mainly on selling soda beverages. So, monster has a limited consumer group as its target consumers are the main drivers, manual labor, and people who have to work overnight that need to take in energy. Meanwhile, consumers in another area may not even try to buy its products. However, the other two companies can have a larger consumer group as people of all ages may try to buy their products as their products are not classified as energy drinks. Therefore, it is better to choose to invest in Pepsi or Coca-Cola instead of Monster because they sell products in a large category compared to Monster.

Last but not the least, Monster was set up in 2002, Coca-Cola was set up in 1886 and PepsiCo was set up in the 1890s. Monster had a shorter history of more than 100 years compared to the other two companies. Therefore, Monster does not have strong branding as it only has a history of 20 years until now while the other two companies have already had a history of more than 100 years which means the number of their loyal customers is smaller than the other two companies. That is because the other two companies have a strong recognition among consumers of all ages and all around the world while many consumers even have not heard about Monster before. On top of that, because Monster is smaller than Pepsi and Coca-Cola, which is facing higher costs than the other two companies, as well as the fact that Monster doesn't sell as widely as the other two companies, the business risk is higher than the other two. Therefore, it is better to invest in Pepsi or Coca-Cola instead of Monster.

5. Conclusion

In this paper, the leverage ratio, equity beta and WACC were calculated using the formula. As seen above, MNST has a lower leverage ratio than Pepsi and Coca-cola, which have similar leverage ratios. A high leverage ratio in economic terms means that a small amount of capital is supporting an excessive amount of debt, which means that MNST's equity is high because it is not very large and therefore does not take on that much debt. After that, Equity beta can also be referred to as business risk and it is clear that MNST's equity beta of 0.93 is higher than the equity beta of the other two companies, which means that MNST is a higher business risk than the other two companies. There are many reasons for this outcome, such as the price differences mentioned above, size, cultural differences, and the impact of the epidemic. Finally, MNST's WACC value is 3.01%, again lower than the other two companies, and a low WACC means that the company cannot generate higher profits for its investors. Then investors would favor Coca-Cola and Pepsi over Monster by calculating equity beta and WACC. However, monsters can increase their investment rate by reducing business risks, such as good business policies, market research, etc.

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