

Research on the Investment Value of Three Companies on Industrial Sectors in the U.S. Capital Market

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Abstract. Stocks and bonds issued by industrial companies listed and traded on the stock exchange belong to industrial stocks. For example: electric power, steel, automobile, food, beverage, wine, textile, pharmaceutical, and other enterprises engaged in product manufacturing stocks, bonds and other securities. In the United States, industrial stocks make up a large proportion of the economy. In the process, investors can make a lot of profits. Despite more than a century of growth in such industries, there is still a lot of potential. Industrial stocks are among the areas with the longest shelf life in the United States and the world. This paper analyses the selected three companies in industrial sector the three aspects of risk, profitability and market ratio to predict basic trend in this area. Three companies are Canadian National Railway Company (CNI), Caterpillar Inc. (CAT), FedEx Corporation (FDX). The results show Canadian National Railway Company is less risky and FedEx Corporation is least profitable. The findings in this paper may benefit the different investors in financial markets on investment decisions.

Keywords: Industrial sector; Profitability; Risk; Market ratio.

1. Introduction

In 2020, due to the impact of the new crown pneumonia epidemic, which has not taken place in a century, the international financial market has experienced violent fluctuations. Due to the "closed city" policies of various countries, the liquidity of international capital has declined to a large extent, and the pressure on the international financial market has also increased. This triggered very serious volatility in global financial markets. In 2020, the U.S. stock market has seen massive ups and downs on all trading days during this time period. There are 4 first-level fuses among them. At the same time, the same problems have arisen in European and Asian equities. In the new crown epidemic, the global stock market has shown a phenomenon of rising and falling together. Various risks in different markets are also increasing, so the overall global financial system is unstable[1]. Industrial stocks have been an important topic for many researchers. Take the aviation industry. The aviation industry is closely related to the virtual economic system of modern society. No matter in Britain, America or Japan, the financing mode of the aviation industry is more and more market-oriented direct financing. In China, aviation industry enterprises have gradually transformed from the original production and management enterprises to the capital management enterprises, and "borrowing" the capital market to enhance the company value has become the path choice for the development of China's aviation industry. Jiangsu aviation industry occupies an important position in the national aviation industry system. In the mid-1990s, its output value and income accounted for about 15% of the country, and its profits and taxes were as high as 40%[2]. consequently, this paper will begin to analysis three companies in industrial stock market. Three companies are Canadian National Railway Company(CNI), Caterpillar Inc.(CAT), FedEx Corporation(FDX). By analyzing three companies, it will enable investors to know more about industrial stock.

Canadian National Railway Company is the largest railway company in Canada and the fifth largest in North America. The company's trunk rail lines span North America from the Atlantic coast in the east to the Pacific coast in the west to the Gulf of Mexico in the south, which is special in North America. The company's services contain mapping and networking in the beverage, size loadings, metal minerals, petrochemicals and other industries.

Beginning in 1925, Caterpillar is one of the largest manufacturers of construction machinery and mining equipment, one of the biggest producers of gas engines and the largest manufacturers of industrial gas turbines in the world. Although there are differences in the degree of automation of production due to differences in certain regions[3]. Caterpillar has experienced nearly a hundred years of development from its birth to the present, and encountered several challenges of life and death. Caterpillar is a world-leading manufacturer of construction machinery, mining equipment, diesel and natural gas engines, industrial gas turbines and diesel electric locomotives[4].

Fedex is an international express delivery company, offering every kind of delivery, such as overnight delivery, ground delivery, and heavy cargo delivery. FedEx offers a full range of services to customers and businesses, including transportation, e-commerce and business.

Remainder is summarized in what follows. The data are presented in part 2, way is explained in section 3, and the results and conclusions are presented in part 4 and 5, respectively.

2. Data

The data used in this paper comes from Yahoo Finance (<https://finance.yahoo.com/>). This article selects Canadian National Railway Company (CNI), Caterpillar Inc. (CAT), FedEx Corporation (FDX). Canadian National Railway Company is the largest railway company in Canada and the fifth largest in North America. One of the biggest producers of engines of gas, of gas turbines in industrial, is Caterpillar. FedEx's global air and ground network can deliver time-sensitive packages in as little as one to two business days in most cases, with guaranteed on-time delivery and a "On-Time Delivery Guarantee." Hence, this paper chooses these three brands. These three companies serve as closing prices for the 2022. Also, this article considers selecting these companies because they belong to industrial sectors in financial market.

3. Methods

3.1 Risk factor analysis

In this paper, it shows market cap, current ratio, quick ratio, debt ratio and beta to analysis risks of three companies. Market capitalization refers to the sum of the assets, sources of income, risks and future growth of a company, as assessed by investors on the public equity market [5]. The current ratio is a ratio. This method is used to assess an enterprise's ability to assume a current liability with the total current assets. The quick ratio complements the current ratio analysis. The difference of current ratio and the quick ratio is the calculation of the quick ratio, in which inventory is ignored [6]. Debt ratio is ratio of total liabilities to its assets [7]. Beta represents the volatility of a stock price relative to the overall stock market.

3.2 Profitability analysis

In this paper, it shows total asset turnover, profit margin, ROA, and ROE to illustrate profitability of three companies. Total turnover is ratio of sum of revenue to average assets, which refers to an indicator that helps investors understand how effectively a company is using its assets to produce sales. Profit margin refers to net income after tax as a percentage of revenue. The ROA ratio is calculated as net income (excluding taxes) divided by total assets. ROE measures the return on capital invested by shareholders in an enterprise [8].

3.3 Market ratio analysis

In this paper, it shows PE, P/B, dividend, PEG, and momentum to point market ratio. PE ratio (PE) is the average P/E ratio in the quarter in which the issued shares are offered to the public. [9] Price-to-book value (PB) is the share price divided by the net value per share. A share dividend is a dividend paid by a corporation to its stockholders in the form of additional shares. This is not cash. The PEG is an enterprise's price-to-earnings ratio divided by its rate of earnings growth over time. The PEG

ratio is a ratio that it is used by many investors when they want to analysis stock [10]. Momentum shows one kind trend of the speed of price in stock market.

4. Results

4.1 Risk analysis

This paper analyses the risk of three companies and the results is summarized in table 1. Market Cap of Canadian National Railway Company is 84.94B. Market Cap of Caterpillar Inc. is 100.189B. Market Cap of FedEx Corporation is 60.287B. Hence, the FedEx Corporation has the smallest market cap and it shows stock of FedEx Corporation has more potentials for price growth. Also, lower market cap will have more risk. Current ratio of Canadian National Railway Company is 1.09. Current ratio of Caterpillar Inc. is 1.46. Current ratio of FedEx Corporation is 1.3. Three companies' liquidity is suitable, because current ratios of three companies are bigger than one. Because of good liquidity, the capital is abundant, which means that if there are special circumstances, there will be no bankruptcy, so the risk is small. In terms of quick ratio, Canadian National Railway Company's quick ratio is 0.91. Quick ratio of Caterpillar Inc is 0.99. Quick ratio of FedEx Corporation is 1.38. Hence, FedEx Corporation is better than other two companies because it is greater than one. For the leverage risk, by looking total debt ratio, Canadian National Railway Company has the smallest leverage, Caterpillar Inc. has highest leverage. In terms of beta, Canadian National Railway Company and Caterpillar Inc. are better than FedEx Corporation, since they are less than 1, which means they are below the average risk. As a result, Canadian National Railway Company is less risky compared with other two companies, which are FedEx Corporation and Caterpillar Inc.

Table1. Descriptive statistics of the risk factor

Stock	Canadian National Railway Company	Caterpillar Inc.	FedEx Corporation
Market Cap	84.94 B	100.189 B	60.287 B
Current Ratio	1.09	1.46	1.3
Quick Ratio	0.91	0.99	1.38
Debt Ratio	0.53	0.80	0.71
Beta	0.64	0.99	1.24

4.2 Profitability analysis

Table2. Descriptive statistics of the profitability

Stock	Canadian National Railway Company	Caterpillar Inc.	FedEx Corporation
Total Asset Turnover	0.32	0.64	1.09
Profit Margin	0.33	0.12	0.04
ROA	0.11	0.08	0.04
ROE	0.23	0.39	0.15

This paper analyses the risk of three companies and the results is concluded in table 2. For total asset turnover part, total asset turnover of Canadian National Railway Company is 0.32. Total asset turnover of Caterpillar Inc. is 0.64. Total asset turnover of FedEx Corporation is 1.09. As a result, only total asset turnover of FedEx Corporation is larger than one, which means this company have more revenue for itself. ROA of Canadian National Railway Company is 10%. ROA of Caterpillar Inc is almost 8%. Hence, the ROA of FedEx Corporation is the smallest among these three companies.

The lower ROA number suggests that this company is unable to use more assets to get more profit. ROE of Caterpillar Inc which is 0.39 is bigger than ROE of Canadian National Railway Company which is 0.23. Higher ROE means this company produces profit more effectively from their own assets. But Canadian National Railway Company is almost higher and it is more profitable. FedEx Corporation is least profitable.

4.3 Market ratio analysis

This paper analyses the risk of three companies and the results is concluded in table 3. PE value of Canadian National Railway Company is 22.09. PE value of Caterpillar Inc is 16.35. PE value of FedEx Corporation is 16.59. Hence, PE value of Caterpillar Inc is the smallest and lower PE value shows that investors can pay less per dollar for this company’s overall earning. Income investor will interested in Caterpillar Inc and FedEx Corporation , because their dividend yields are higher than 3% which is dividend yield of Caterpillar Inc is 4.8 and dividend of FedEx Corporation is 4.6. For PEG ratio part, PEG of FedEx Corporation which is 0.9 is less than 1, so FedEx Corporation stock price is cheaper. For momentum part, 50-Day Moving Average of Canadian National Railway Company is 114 and 200-Day Moving Average of Canadian National Railway Company is 122, 50-Day Moving Average of Caterpillar Inc is 192, 200-Day Moving Average of Caterpillar Inc is 204. 50-Day Moving Average of FedEx Corporation is 225, 200-Day Moving Average of FedEx Corporation is 229. All three companies’ 50-Day Moving Average is less than 200-Day Moving Average. For momentum part, all trend of three companies are decreasing so that all of three momentum are not suitable to buy.

Table 3. Descriptive statistics of the market ratio

Stock	Canadian National Railway Company	Caterpillar Inc.	FedEx Corporation
PE	22.09	16.35	16.59
P/B	5.1	5.87	2.43
Forward Dividend & Yield	2.28	4.80	4.60
PEG	N/A	1.49	0.9
50-Day Moving Average 3	119.65	185.29	227.74
200-Day Moving Average 3	121.78	203.48	228.20

5. Conclusion

This paper analyses a lot of index to show three companies’ risk, profitability, and their market ratio. Different investors may interest in different company. Value investor are more likely to PB ratio which is under two. But these three companies’ PB value is higher than 2. PEG investor is pay more attention to peg ratio. PEG investor may interest three company. For income investor, they are more focus on high dividend and they are more likely to like Caterpillar Inc and FedEx Corporation. This paper helps investor make decisions when they want to buy stock or invest.

However, these models still have other limitations. There is no denying that there are other factors or reasons affecting index in stock, such as epidemic. In 2020-2022, due to the influence of the epidemic, the situation in stock market is more special and deserve further discussion.

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