

**COLEGIO UNIVERSITARIO DE ESTUDIOS FINANCIEROS**

**Trabajo de Fin de Grado**



**Financial Analysis of the Financial Statements and Industry**

**Comparison:**

**THE COCA-COLA COMPANY and PEPSICO**



**Bilingual Degree in Business and Management**

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# **1. INTRODUCTION**

## **1.1 TFG Justification and Objective**

This world improves with competition. Competing allows individuals and organizations to be better, more efficient, and smarter. When one company competes with another for market share and profit, they both learn from each other and improve together. This is the basis of the choice to analyze the financial statements of The Coca-Cola company, commonly known as “Coca-Cola”, and PepsiCo, known as “Pepsi”. Both companies have some similarities, starting from the time they were created and going on to their unique way of selling their drinks. Both companies have grown together, but they have also used different strategies to expand. By comparing their balance sheets and income statements, it is expected to find be many differences, on which will be commented and studied. These differences will show how their growth model is working, their stability, their future expectations, and their inefficiencies —as it is expected to find inefficiencies in both companies.

## **1.2 Company Histories**

The Coca-Cola company and PepsiCo have been huge rivals throughout the years. This rivalry started seven years after the creation of Coca-Cola, which took place in 1886 by pharmacist John S. Pemberton, when Pepsi was created by another pharmacist, Caleb Bradham.

At first Pepsi was sold in drugstores as a drink for aiding digestion but, as the years went by, it began being sold as a drink for people to enjoy (Bellis 2018) (Bhasin 2013). Pepsi went bankrupt in 1923 for “gambling on sugar prices” (they believed that prices were going to rise, so they purchased an excessive amount of sugar). In 1931 Pepsi was sold to Loft Candy Co, but it was still not selling enough, and it was even offered to Coca-Cola during the Great Depression. Loft Candy’s president, Guth, reformulated the soda and the sales strategy and suddenly Pepsi was being sold again. In the 1960’s Pepsi reformulated their strategy and acquired Mountain Dew. Later that decade, Pepsi merged with Frito-Lay to become what is now known today as PepsiCo. Since then, Pepsi has been launching new products and has grown to be a bigger and more stable company than Coca-Cola through their market diversification (Tikkanen, Enciclopedia Britannica s.f.).

On the other hand, Coca-Cola was first sold in a soda fountain — a very popular place for social gatherings at that time, usually close to an apothecary — as a drink to cure ailments. In 1888 its creator, Pemberton, died, but not before selling the company to Asa Griggs Candler who, by 1892, acquired the company and incorporated it as The Coca-Cola Company. In 1919, Coca-Cola was sold to a group of investors that began selling the beverages for home consumption. The post-World War II years saw diversification in the packaging of Coca-Cola and the development and acquisition of new products. The trademark “Coke,” first used in advertising in 1941, was registered in 1945. In 1946 the company purchased rights to Fanta, a soft drink previously developed in Germany, and to the lemon-lime drink, Sprite, in 1961. Since then, Coca-Cola has acquired various different beverages from the same sector — non-alcoholic beverages. In 1981, Roberto C. Goizueta became chairman of the board of directors and CEO of Coca-Cola. Goizueta organized the various U.S. Coca-Cola bottling operations into a new public company, Coca-Cola Enterprises Inc. Coca-Cola has become one of the most recognizable brands and trademarks in the world. With over 1.7 billion servings of Coca-Cola products being served each day, Coca-Cola continues to be one of the world’s most ubiquitous beverages (Tikkanen, Enciclopedia Britannica s.f.) (Yafai 2016).

The beginnings of the Coca-Cola company and Pepsi have not differed too greatly, one of the many reasons why nowadays, the companies still fight for a position in the marketplace.

### **1.3 Non-Alcoholic Beverages Sector Analysis and Trends**

The non-alcoholic beverages sector includes mainly soft drinks and hot drinks, such as water, carbonated drinks, juices, tea, coffee, etc. Companies in the soft drink industry reach the end market in two ways. One way is by selling finished products, made at company-owned bottling facilities, to distributors and retailers. Another way is by selling beverage concentrates and syrups to authorized bottling partners, who then make the final product by combining the concentrates with still or carbonated water, sweeteners, and other ingredients. Coca-Cola and Pepsi use both ways to reach the final customer. These two companies particularly have an incredible pricing power and can also produce and distribute third-party brands.

The global soft drink market is led by carbonated soft drinks (or CSDs), which had a market size of \$337.8 billion in 2013. In the same year, CSDs were followed by bottled water, with a market size of \$189.1 billion, and juice, with a market size of \$146.2 billion. In this market there are different companies competing, the main competitors are: The Coca-Cola company, PepsiCo, Dr Pepper Snapple Group, Monster Beverage Corporation, and Cott Corporation. Coca-Cola and Pepsi are part of the consumer staple sector, which is essentially composed of products that people are unlikely to stop buying regardless of their financial situation, such as beverages, tobacco, producers of non-durable goods, and personal products. Products like this are considered to be less sensitive to economic cycles. (Fidelity s.f.) (Bailey, Market Realist 2014) (Bailey, Market Realist 2014)

The term soft drink originated to distinguish the flavored drinks from hard liquor or distilled spirits. Soft drinks were recommended as a substitute in the effort to change the hard-drinking habits of early Americans. In fact, health concerns of modern consumers led to new categories of soft drinks emphasizing low calorie count, low sodium content, no caffeine, and “all natural” ingredients.

The regular consumption of soft drinks has been associated with multiple chronic health conditions. These increased risks are largely due to the added ingredients in soft drinks, especially sugar. Indeed, some sugar-sweetened soft drinks contain 40 grams of sugar or more per 12-ounce serving, which exceeds the recommended daily sugar intake for adults. Long-term consumption of soft drinks is linked to weight gain, obesity, and tooth decay. Sugar-free soft drinks also have been associated with dental erosion. Concerns about the negative health effects of soft drinks have given rise to debate about legally restricting their consumption through soda bans, increased soda taxes, and other regulatory measures. In January 2014 Mexico became one of the first countries to impose a nationwide revenue-raising tax on soft drinks containing added sugar. Later that year Berkeley, California, became the first city in the United States in which voters unanimously approved a tax on sugary drinks. In 2015, a ban on the sale of caffeinated soft drinks to children went into effect in the Vologda region of Russia. That same year authorities in San Francisco approved a measure that would require soft drink manufacturers to add health warnings to soft drink labels, similar to the health warnings displayed on labels for alcohol and tobacco products. As it can be seen, governments from different countries are realizing of the health

issues that CSDs bring and acting toward this, but is not only the governmental institutions realizing this, people have started to realize this too and carbonated drinks consumption has been decreasing. On the other hand, bottled water, ready-to-drink coffee, and energy drinks are increasing their volume sales. (Pietka 2019) (Beverage Marketing Corporation 2015) (Beverage Marketing Corporation 2017)

U.S volume decade comparison from 2007-2017		
Category	Millions of gallons	CAGR
Bottled Water	4898	4.50%
RTD Tea	514	3.60%
Energy Drinks	350	7.50%
Sport Drinks	183	1.30%
Bvalue-Added Water	100	1.80%
RTD Coffee	94	11.20%
Fruit Beverages	-759	-2.20%
CSD	-2382	-1.80%
Total	2998	0.90%

*Table 1- U.S volume decade comparison from 2007-2017*

As it can be seen in this graph, from the Beverage Marketing Corporation about volume sales from 2007 to 2017 in U.S (the largest CSD consumer country), CSDs have decreased greatly in the last 10 years, giving rise to bottled water, which have increased their sales the most, expanding to 4898 more gallons sold in 2017 than in 2007.

Lastly, in general, overall revenues in the non-alcoholic beverages sector have been decreasing as well.

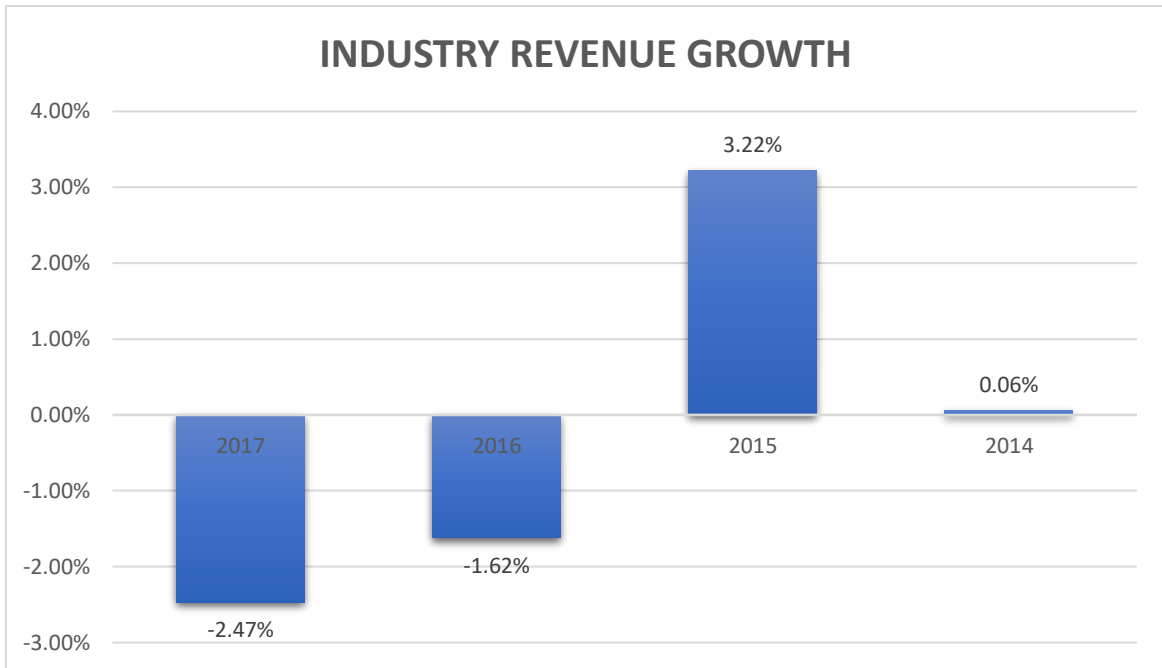


Table 2- Industry revenue growth from 2014-2017

As it can be seen in this graph, for the last two years analyzed in this paper, 2016 and 2017, the non-alcoholic beverages industry has been decreasing, and for the last four years, from 2014-2017, there has been no growth in the industry.

#### 1.4 Tax Reform Act

The tax cuts and jobs act, or TCJ, is a regulatory reform that was imposed by the new Republican government at the end of 2017 and affected most international American companies. The TCJ act made several significant changes not only to companies, but also to households. As it also affected the results of Coca-Cola and Pepsi for 2017, it is these aspects that are going to be analyzed. Essentially, the U.S government made profit repatriation more attractive for companies by establishing a tax of 15.5% for a onetime repatriation of cash, while the tax for other non-cash assets was also reduced to 8%. Before, the tax rate for profits returned to U.S was at 35%, which led many companies to keep the money that the country generated for a future reinvestment in that country or in any other one. This meant that U.S didn't get back some of the money from profits out of the country. According to The Coca-Cola Company, in their income statement: *"The tax reform act includes net tax expense of \$3,610 million primarily related to our reasonable estimate of the one-time transition tax resulting from the Tax Reform Act that was signed into law on December 22,*

*2017, partially offset by the impact of the lower rate introduced by the Tax Reform Act on our existing deferred tax balances.” While for Pepsi: “During the fourth quarter of 2017, the TCJ Act was enacted in the United States. Among its many provisions, the TCJ Act imposed a mandatory one-time transition tax on undistributed international earnings and reduced the U.S. corporate income tax rate from 35% to 21%, effective January 1, 2018. As a result of the enactment of the TCJ Act, we recognized a provisional net tax expense of \$2.5 billion in the fourth quarter of 2017.” (Bartash 2018) (PepsiCo Inc 2017) (The Coca-Cola Company 2017).*

For the non-alcoholic beverage sector in the fourth quarter of 2017 the effective industry tax rate was 76% due to this measure, while the average for the past years had been 25.6%. (CSI market s.f.).

By reading this it can be concluded that the cause of a lower net income in the year 2017 for Coca-Cola and Pepsi is due to an increase in taxes that year and that year’s tax increase in both companies was, in particular, due to the TCJ act that gave an incentive to both companies to repatriate their profits held in other countries. For Coca-Cola, the TCJ act supposed 53.5% of the total profit before taxes, while for Pepsi it supposed a net 25.5%. These numbers added to the other taxes that Coca-Cola and Pepsi had to pay added to total tax rate of 82.5% and 48.9% respectively.

## **2. METHODOLOGY**

This project is going to be based on the analysis of the financial statements of Coca-Cola and Pepsi. The initial step was to find the income statements and balance sheets of both companies from the year 2014 to the year 2017. Using this information, a horizontal and vertical analysis will be conducted to analyze these statements. After this first analysis the balance sheet and income statement information together with the sector information will be used to calculate different types of ratios that will help to understand both companies’ financial statements. In particular, four types of ratios: Activity ratios, Profitability ratios, Solvency ratios, and Liquidity ratios. Both companies’ ratios by themselves can be compared to each other, but cannot be used to evaluate each company’s performance in reality. As a result, these ratios will also be compared to those of the non-alcoholic beverages industry, which will be a measurement benchmark



and aid in seeing how the companies are performing compared to their industry. As well, the root of the differences between the companies and the industry will also be discussed. To generate the non-alcoholic beverages industry ratios the following companies were used:

New Age Beverages, Corp.
Attitude Drinks, Inc.
Mojo Data Solutions, Inc.
Healthient, Inc.
Coca-Cola Enterprises, Inc.
Celsius Holdings, Inc.
Coca-Cola Consolidated, Inc.
Cott, Corp.
China Ginseng Holdings, Inc.
Dewmar International Bmc, Inc.
Fbec Worldwide, Inc.
Keuring Dr Pepper, Inc.
Satusa, Corp.
Fbec Worldwide, Inc.
National Beverage, Corp.
Life on earth, Inc.
Right on brands, Inc.
Jammin Java, Corp.
Jones Soda, Co.
Coca Cola, Co.
KonaRed, Corp.
Leading Brands, Inc.
Long Blockchain, Corp.
Mojo Data Solutions, Inc.
Monster Beverage, Corp.
Mojo Organics, Inc.
Musclepharm, Corp.
New Age Beverages, Corp.
Peets Coffee & Tea, Inc.

PepsiCo, Inc.
Pulse Beverage, Corp.
Reddy Ice Holdings, Inc.
Reeds, Inc.
Rocky Mountain High Brands, Inc.
Sport Endurance, Inc.
Skinny Nutritional Corp.
Smartag International, Inc.
High Performance Beverages Co.
True Drinks Holdings, Inc.
Uplift Nutrition, Inc.
Vim Beverage, Inc.
Diageo Plc.
Ambev S.a.

*Table 3- Companies used to generate non-alcoholic beverage industry ratios*

The next step will be analyzing the cash flow statement of both companies. Once finished, final conclusions will be drawn based on the companies and sector analysis.

### **3. BALANCE SHEET AND INCOME STATEMENT ANALYSIS**

#### **3.1 Horizontal Analysis**

The horizontal analysis is used in financial statement analyses to compare historical data over a number of accounting periods. It's done by performing a comparative analysis between the financial statements of every year, comparing them with the year before statements. This way, the increase from year to year in each statement can be obtained. The results will show the relevant tendencies. There are different ways of performing a horizontal analysis, but in this case, the calculation of the percentage variance of each year, using 2014 as a benchmark for the rest of the years, is going to be done. In essence, the changes of every year in respect to 2014 are going to be seen. Therefore, to do the horizontal analysis the years statements needs to be divided by the initial year statement — 2014. (Merchante 2011) (Jerry Weygandt s.f.) (C. William Thomas s.f.) (Kenton 2018)

THE COCA-COLA COMPANY (% change)

INCOME STATEMENT	2017	2016	2015	2014
<b>Net Revenue</b>	<b>77.0%</b>	<b>91.0%</b>	<b>96.3%</b>	<b>100.0%</b>
(Cost of goods sold)	74.1%	92.0%	97.7%	100.0%
<b>Gross profit</b>	<b>78.8%</b>	<b>90.4%</b>	<b>95.4%</b>	<b>100.0%</b>
(operating expenses)	80.7%	90.9%	89.8%	100.0%
<b>EBIT</b>	<b>75.0%</b>	<b>89.3%</b>	<b>106.9%</b>	<b>100.0%</b>
(Interests and taxes)	267.4%	80.3%	118.0%	100.0%
<b>Net income</b>	<b>17.6%</b>	<b>92.0%</b>	<b>103.6%</b>	<b>100.0%</b>

Table 4- Coca-Cola income statement horizontal analysis

As seen above, there is a general and constant decline from the year 2015 to the year 2016, and from the year 2016 to the year 2017, in almost every part of the income statement. There is a small decline in taxes from 2015 to 2016 when revenues are decreasing. But the most important change comes in 2017, when net income decreases to become 17.6% of the net income that there was in 2014. When looked at more closely, it can be noticed that in the same year, interests and taxes increase by more than 250%, which is the main cause of such an incredible decline in net income. This large increase in interests and taxes is related, in particular, to new regulatory changes that the United States government set in 2017, as was explained in section 1.4.

#### THE COCA-COLA COMPANY (% change)

BALANCE SHEET	2017	2016	2015	2014
<b>Total assets</b>	<b>95.52%</b>	<b>94.83%</b>	<b>97.90%</b>	<b>100.00%</b>
Non-current assets	86.98%	90.21%	96.04%	100.00%
Current assets	110.79%	103.10%	101.24%	100.00%
<b>Equity + Liabilities</b>	<b>95.52%</b>	<b>94.83%</b>	<b>97.90%</b>	<b>100.00%</b>
Equity	62.10%	75.98%	84.30%	100.00%
Non-current liabilities	143.44%	128.98%	128.57%	100.00%
Current liabilities	84.00%	81.95%	83.18%	100.00%

Table 5- Coca-Cola balance sheet horizontal analysis

In the case of the balance sheet, Coca-Cola has stability on the asset side and a clear growth on external financing (liabilities), while internal financing (equity) decreases. Most of the increase in liabilities is in long-term liabilities, which increase by almost 50% from 2014 to 2017. In terms of assets, non-current assets increase while current assets decrease.

#### PEPSICO (% change)

INCOME STATEMENT	2017	2016	2015	2014
<b>Net Revenue</b>	<b>95.26%</b>	<b>94.18%</b>	<b>94.56%</b>	<b>100.00%</b>
(Cost of goods sold)	93.20%	91.34%	93.03%	100.00%
<b>Gross profit</b>	<b>97.04%</b>	<b>96.62%</b>	<b>95.88%</b>	<b>100.00%</b>
(operating expenses)	92.42%	94.61%	99.06%	100.00%
<b>EBIT</b>	<b>109.69%</b>	<b>102.13%</b>	<b>87.18%</b>	<b>100.00%</b>
(Interests and taxes)	184.22%	112.65%	94.56%	100.00%
<b>Net income</b>	<b>74.57%</b>	<b>97.17%</b>	<b>83.71%</b>	<b>100.00%</b>

Table 6- Pepsi income statement horizontal analysis

Pepsi's income statement shows more stability than Coca-Cola's, as revenues slowly decrease, expenses do the same. Again, everything is completely normal until the net income of the year 2017 which, again, shows a big decrease. This decrease is not as big as in Coca-Cola's case, but it can be clearly seen that the cause is the same as interest and taxes almost double in 2017. This has to do with the policy change explained in this paper in section 1.4. Other than this, the only other important change is the increase in EBIT from 2015 to 2016, while the revenues stay the same, which later leads to a higher net income in 2016. This is due to a cost reduction in 2016, as operating expenses and cost of goods sold (COGS) are both lower that year.

PEPSICO (% change)

BALANCE SHEET	2017	2016	2015	2014
<b>Total assets</b>	<b>113.18%</b>	<b>104.23%</b>	<b>98.81%</b>	<b>100.00%</b>
Non-current assets	97.86%	94.37%	93.56%	100.00%
Current assets	150.16%	128.01%	111.46%	100.00%
<b>Equity + Liabilities</b>	<b>113.18%</b>	<b>104.23%</b>	<b>98.81%</b>	<b>100.00%</b>
Equity	62.58%	63.82%	68.55%	100.00%
Non-current liabilities	138.58%	118.03%	114.88%	100.00%
Current liabilities	113.32%	116.82%	97.16%	100.00%

Table 7- Pepsi balance sheet horizontal analysis

In the balance sheet, it can be seen that, like in Coca-Cola's case, Current assets and non-current liabilities increase, but in this case, non-current assets and current liabilities stay stable over time. This means that this increase is through a decrease in equity and an overall growth in assets and liabilities. These new assets are mostly financed with non-current liabilities, which increase by almost 40% since 2015.

### 3.2 Vertical Analysis

A vertical analysis consists of transforming the numbers in percentages of the total or initial amount of each of the different statements, this way we will see the weight of each statement over the total amount. Essentially, a benchmark will be set, that in the case of the income statement will be sales, and in the case of the balance sheet it will be the total amount of assets or liabilities and equity. The rest of the financial statements will be compared to their benchmark, being the result, the statement divided by the benchmark. In the vertical analysis the objective is to compare the statements within the same year to see how much of the total percentage of sales, assets and liabilities and equity they account for. (Merchante 2011) (Jerry Weygandt s.f.) (C. William Thomas s.f.) (kenton 2019)

#### THE COCA-COLA COMPANY

INCOME STATEMENT	2017	2016	2015	2014
<b>Net Revenue</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
(Cost of goods sold)	37.44%	39.33%	39.47%	38.89%
<b>Gross profit</b>	<b>62.56%</b>	<b>60.67%</b>	<b>60.53%</b>	<b>61.11%</b>
(operating expenses)	43.06%	41.02%	38.30%	41.08%
<b>EBIT</b>	<b>19.50%</b>	<b>19.65%</b>	<b>22.23%</b>	<b>20.03%</b>
(Interests and taxes)	15.98%	4.06%	5.64%	4.60%
<b>Net income</b>	<b>3.52%</b>	<b>15.59%</b>	<b>16.60%</b>	<b>15.43%</b>

Table 8- Coca-Cola income statement vertical analysis

Coca-Cola's income statement mainly shows that there is stability through the years on the COGS, being about 1/3 of the company's revenue. Operating expenses account for a bit more than COGS, being around 40% of the revenues, and lastly interests and taxes account for 5% approximately, the net income being around 15% of the revenues of Coca-Cola. Again, in this case, it can be seen how in 2017, interests and taxes account for 15% of the total revenue due to the policy changes of the United States government explained in earlier.

#### THE COCA-COLA COMPANY

BALANCE SHEET	2017	2016	2015	2014
<b>Total assets</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Non-current assets	58.42%	61.03%	62.93%	64.15%
Current assets	41.58%	38.97%	37.07%	35.85%
<b>Equity + Liabilities</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Equity	21.59%	26.61%	28.60%	33.21%
Non-current liabilities	47.47%	42.99%	41.51%	31.61%
Current liabilities	30.94%	30.40%	29.89%	35.18%

Table 9- Coca-Cola balance sheet vertical analysis

Coca-Cola's balance sheet shows how current assets get closer to non-current assets, which in 2014 were almost 2/3 of the total assets. In the case of equity and liabilities, equity only accounts for 1/3 of total equity and liabilities in year 2014 and, after a constant decrease, 25% in 2017, while non-current liabilities account for almost 50% in the year 2017. It can be seen how equity, non-current liabilities and current liabilities are almost the same amount in the year 2014 and how only four years after, the weight of the three variables is completely different.

#### PEPSICO

INCOME STATEMENT	2017	2016	2015	2014
<b>Net Revenue</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
(Cost of goods sold)	45.31%	44.92%	45.56%	46.31%
<b>Gross profit</b>	<b>54.69%</b>	<b>55.08%</b>	<b>54.44%</b>	<b>53.69%</b>
(operating expenses)	38.14%	39.50%	41.19%	39.32%
<b>EBIT</b>	<b>16.54%</b>	<b>15.58%</b>	<b>13.25%</b>	<b>14.37%</b>
(Interests and taxes)	8.90%	5.50%	4.60%	4.60%
<b>Net income</b>	<b>7.65%</b>	<b>10.08%</b>	<b>8.65%</b>	<b>9.77%</b>

Table 10- Pepsi income statement vertical analysis

In this case, it can clearly be seen that Pepsi has a much bigger COGS than Coca-Cola, but their operating expenses, interest, and taxes amount for more or less the same percentage of sales than Coca-Cola. This explains how Pepsi's net income is not so different from Coca-Cola's while Coca-Cola's revenues are clearly lower than Pepsi's. Again, in 2017 the effect of the regulatory change explained in section 1.4 can be seen.

#### PEPSICO

BALANCE SHEET	2017	2016	2015	2014
<b>Total assets</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Non-current assets	61.12%	64.01%	66.94%	70.69%
Current assets	38.88%	35.99%	33.06%	29.31%
<b>Equity + Liabilities</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Equity	13.76%	15.24%	17.27%	24.89%
Non-current liabilities	60.55%	56.00%	57.50%	49.45%
Current liabilities	25.69%	28.76%	25.23%	25.66%

Table 11- Pepsi balance sheet vertical analysis

Pepsi's balance sheet vertical analysis distribution is quite different from Coca-Cola's. Pepsi's current assets are generally lower than Coca-Cola's, while their Non-current assets are a bit higher, but just like in Coca-Cola's case, current assets increase through the years while non-current assets decrease. The big differences with Coca-Cola come from the equity and liabilities side. Pepsi's equity is much smaller than Coca-Cola's, but again, the liabilities and equity trends also follow Coca-Cola's trends. Due to these differences between both balance sheet's vertical analysis it can be determined that Pepsi's long-term financing strategy is mostly through external funding (long-term liabilities) while Coca-Cola relies more on internal investors (equity) but both companies are going towards external funding since 2014, which in essence is being done by decreasing their equity and increasing their non-current liabilities.

#### 4. RATIOS AND CASH FLOW ANALYSIS

After doing the vertical and horizontal analysis, this paper is going to analyze different ratios, these ratios will help analyze particular aspects of the balance sheet and income statement that are not possible to see solely with the horizontal and vertical analysis. The ratios, in particular, will not be revealing but the comparison between the two companies' ratios and industry ratios will reveal important information about the companies. These ratios will also reveal important tendencies. Is important to bear in mind that although ratios are meant to be used to compare companies and industries, the dimension factor is not fully neutralized. The importance of the ratios result will also be influenced by how big the statement's amount in the balance sheet or income statement are and how much it varies each year. Small variable amounts cannot determine a trend successfully while large, not variable amounts, can.

## 4.1 Activity Ratios

Activity ratios measure a firm's ability to convert different accounts within its balance sheets into cash or sales, in essence, evaluating the quality of the different capital components. Activity ratios measure the relative efficiency of a firm based on its use of assets, leverage, or other similar balance sheet statements. They are important in determining whether a company's management is doing a good job or not at the time of generating revenues and cash from its resources. Activity ratios measure the amount of resources invested in a company's collection and inventory management, determining an organizations efficiency and profitability (Keaton 2019).

- Assets Turnover Ratio will measure how efficiently an entity uses its assets to make a sale. It's used to evaluate the quality of the investments the company has or the quality of the total assets. It compares the sales of a company to its asset base and will express the frequency by which the assets are renewed. The higher the result is the more return the company is earning with their investments and the less assets this company will need to generate revenue, which will mean less debt and equity required to generate revenue. To calculate this ratio, sales will be divided by assets. (Jerry Weygandt s.f.)

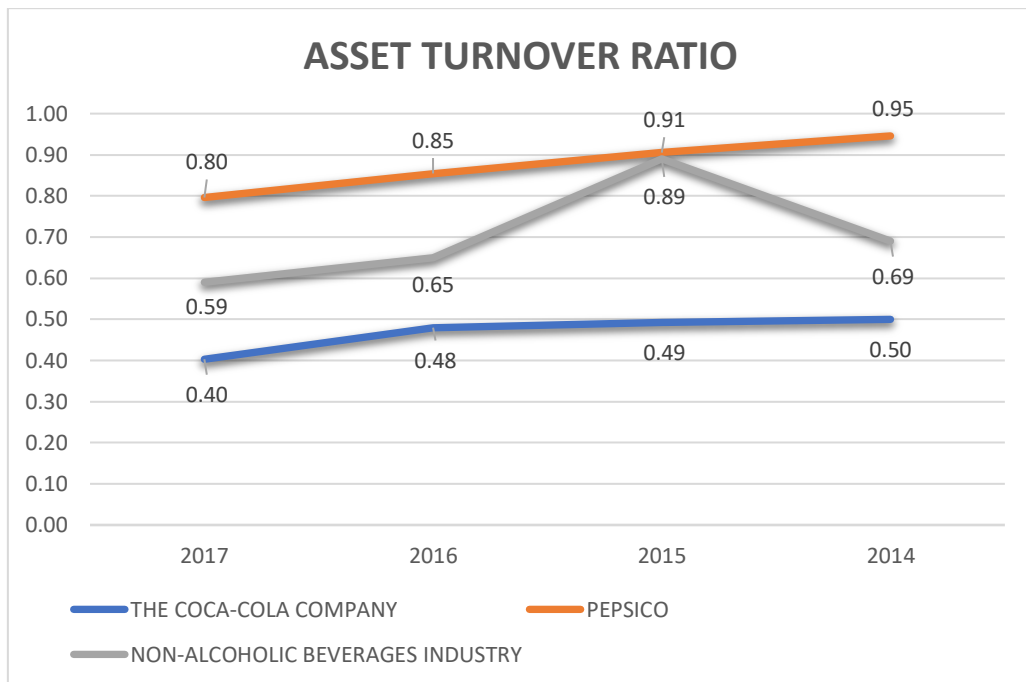


Table 12- Asset turnover ratio



In this graph it is easy to see how Coca-Cola has a very low revenue compared to their assets, the sector's asset turnover ratio is clearly higher every year, this means that Coca-Cola is not using their assets as well as the sector and Pepsi are for production purposes. Pepsi is using their assets better than the benchmark as their asset turnover ratio is the highest one for every year.

- The Inventory turnover ratio measures the rate at which inventory is used over a measurement period. In essence, how often the inventory balance is sold during an accounting period. It can be used to see if a business has an excessive inventory in comparison to its sales, which can be due to low sales or bad inventory planning. Particularly a low turnover rate implies that a business bought too many goods. A low turnover ratio will affect the return. This ratio is calculated by dividing the COGS by the average inventory. Inventory days is the number of days in which the company uses its inventory, and therefore, the range of time in which they will have to order new merchandise. (C. William Thomas s.f.) (Jerry Weygandt s.f.)

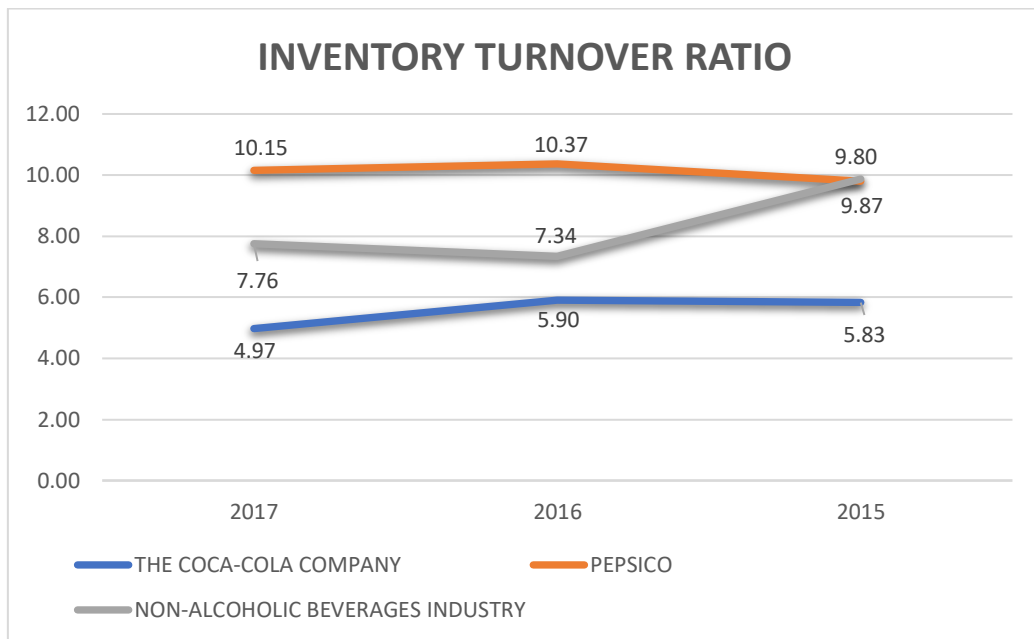


Table 13- Inventory turnover ratio

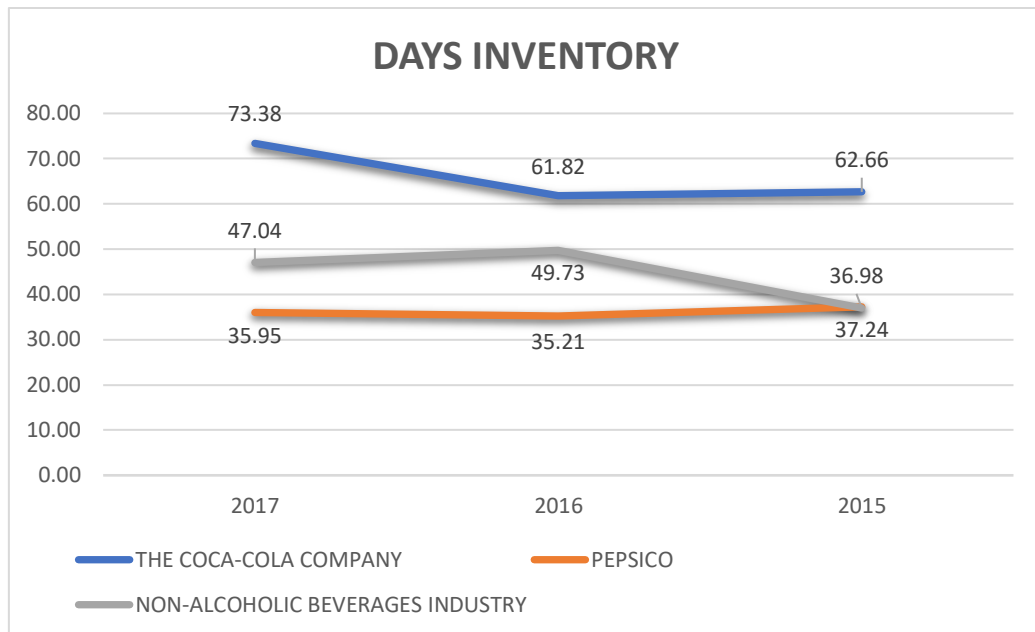


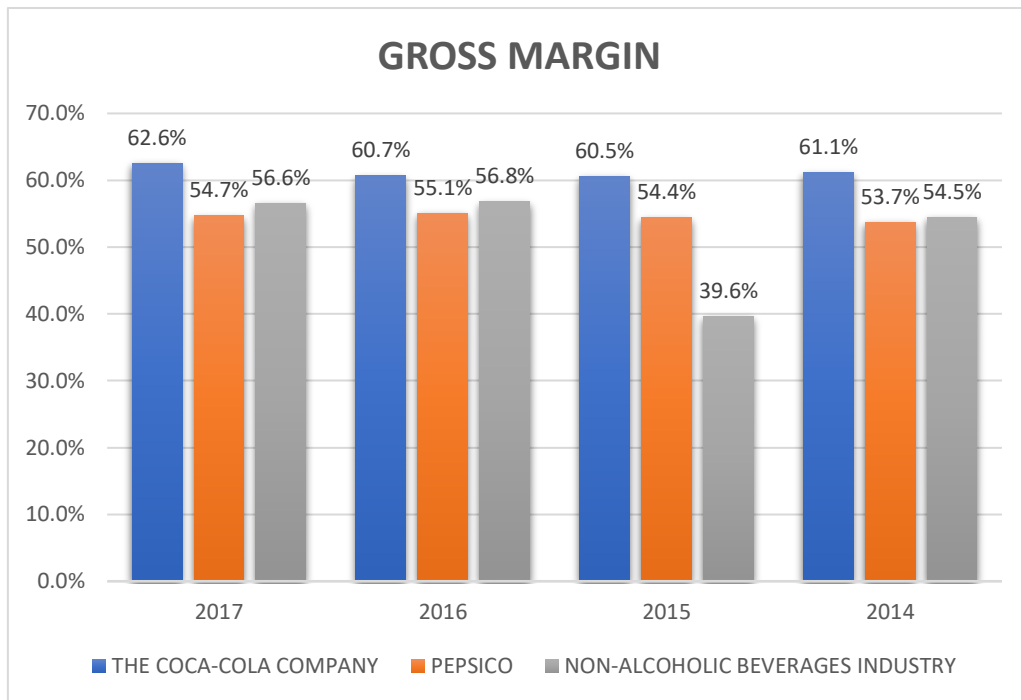
Table 14- Days inventory

In the above graph, it can be seen how Coca-Cola has an inventory turnover ratio below the sector's average every year, having the biggest difference amount in 2015 and 2017. Pepsi's inventory turnover ratio is always above Coca-Cola's and above the industry, which means that Pepsi has had a good inventory planning and sells what they expect to sell in the determined period, while Coca-Cola doesn't.

#### 4.2 Profitability Ratios

The general objective of a company is to maximize profits. The concept of profitability is used to measure the profits obtained by the company in relative terms of their costs, revenues, assets, equity... These ratios will indicate if the company overall is doing well. (Sánchez 2012)

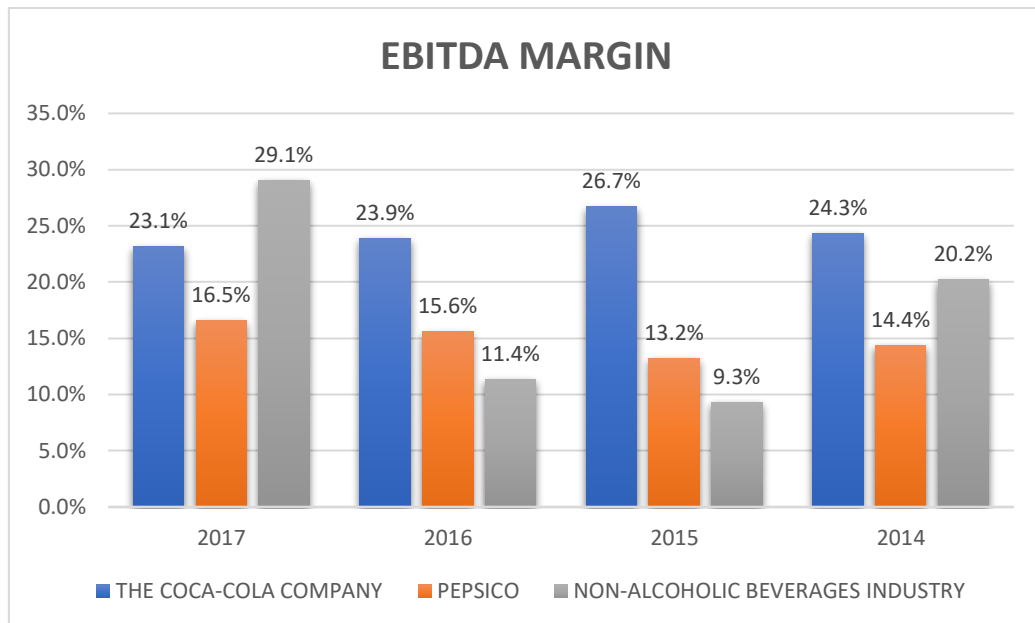
- The gross margin ratio will show the percentage of sales earned as gross margin. The higher the gross margin rate, the higher the return the company will have, and therefore, the lower the production costs are. This ratio will measure the efficiency on the production. The ratio is calculated by dividing gross margin, which is sales minus cost of goods sold (COGS) by sales. (C. William Thomas s.f.) (Sánchez 2012)



*Table 15- Gross margin*

In this case, Coca-Cola has the highest gross margin, being around 60% the percentage that the company obtains of sales after deducting COGS. Comparing it to the industry, which is used as a benchmark, it can be determined that Coca-Cola is more efficient at using the resources necessary to generate the products sold. Pepsi is more less where the industry is at every year except for 2015, in which the industry gross margin drops.

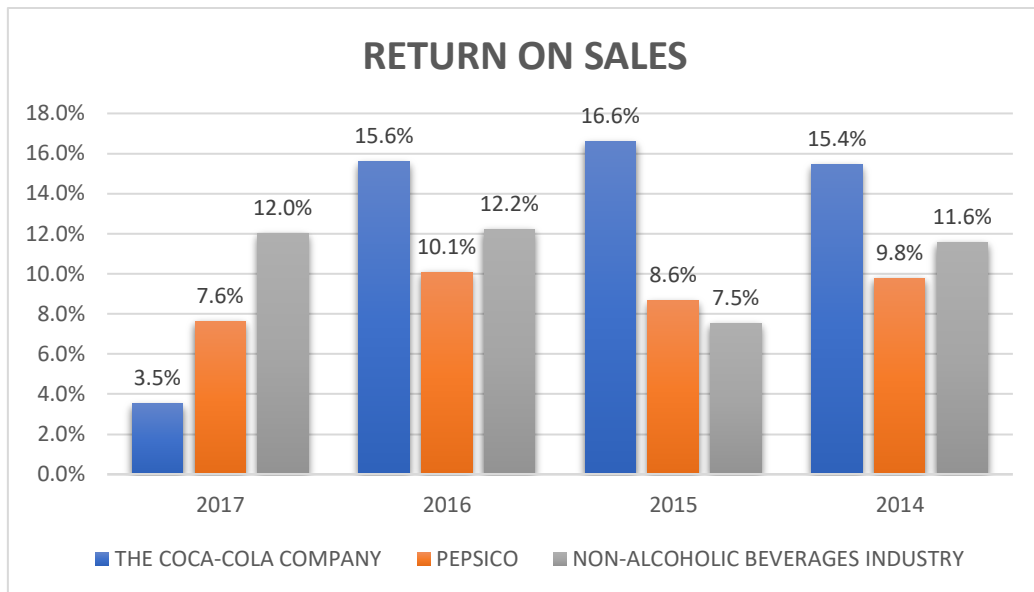
- The EBITDA (Earnings Before Interests, Taxes, Depreciation and Amortization) margin will show a firm's operating profitability as a percentage of the total revenue, in essence EBITDA divided by total sales. The EBITDA margin can provide a clear view of a company's profitability and cash flow. The higher the EBITDA margin is the lower the total operating expenses are (Chen 2018).



*Table 16- EBITDA margin*

In this case the EBITDA margin is going to have a very different disposition than in the gross margin case, doing the comparison of Coca-Cola and Pepsi, Coca-Cola has a bigger margin than Pepsi, just like in the gross margin case. This certifies that Coca-Cola's expenses are less than Pepsi when comparing them with the revenues, therefore Coca-Cola is more efficient at the time of managing operating expenses. On the other hand, the sector ratios vary a lot and end up being higher than Coca-Cola in the year 2017 with 29.1% of revenue from initial sales. Pepsi has a higher EBITDA margin than the industry during the years 2015 and 2016. The evolution of the Industry's EBITDA ratio is very unstable through the years.

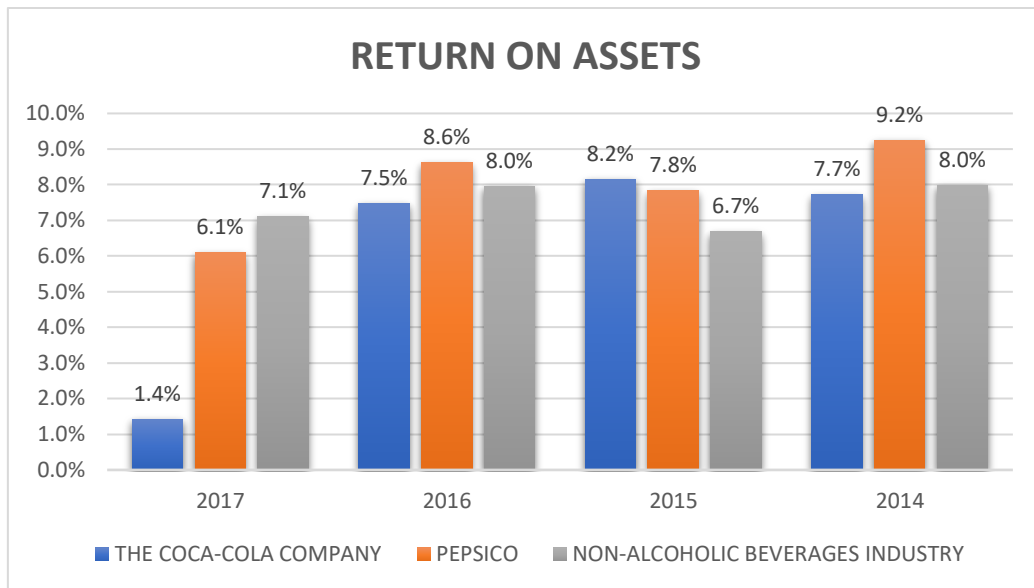
- The ROS (Return on Sales) ratio measures the actual return that the company obtains divided by sales, which in essence, is an indicator of efficiency. This ratio was already obtained at the time of doing the vertical analysis, but now the added industry ratios will be used to show the real difference and will provide a benchmark to compare Coca-Cola and Pepsi. This ratio will provide information on how efficient the process of producing the revenues, financing the projects and any other cost there is in the selected years (Merchante 2011).



*Table 17- Return on sales*

The Coca-Cola Company is the most efficient during the period 2014-2016 as the return on sales is higher than the industry and Pepsi. On 2017, the effect of the tax reform act is shown and return on sales decrease a lot for Coca-Cola and Pepsi but not for the sector as the company's in the sector are from a wide variety of countries and have different sizes. Coca-Cola's return on sales is over the benchmark, while Pepsi's is, generally, slightly under the industry, what means that Pepsi's net income could be bigger if a better management of costs was applied to their value chain.

- The ROA (Return on Assets) ratio relates the benefit achieved with the total amount of assets the company has. Is used to see the efficiency on the use of a company's assets to generate revenues independent on where this financing comes from. To obtain this ratio net income has to be divided by assets. (Jerry Weygandt s.f.)



*Table 18- Return on assets*

In this graph, it can be seen that the return on assets is lower for Coca-Cola, at the time of comparing net income with sales Coca-Cola had a big advantage over other industry competitors but now Coca-Cola does not have this advantage anymore as their return on assets is slightly under Pepsi's and the industry's. Pepsi is above the industry every year except for 2017 due to the TCJ act already explained in section 1.4.

- The ROE (Return on Equity) has the objective of evaluating the return that the company has on their own resources, particularly, the return that the owners had that year on their investment. To be able to identify where the potential problem or advantage relies, it can be drilled down to a ratio containing three different variables: total asset turnover, profit margin or return on sales, and the equity multiplier, which will be assets divided by equity. The equity multiplier is also named financial leverage and will measure the amount of external financing that the company has, in essence how leveraged they are. By simplifying this equation, the simplified ROE can be obtained, or what is the same, net income divided by equity (Merchante 2011).

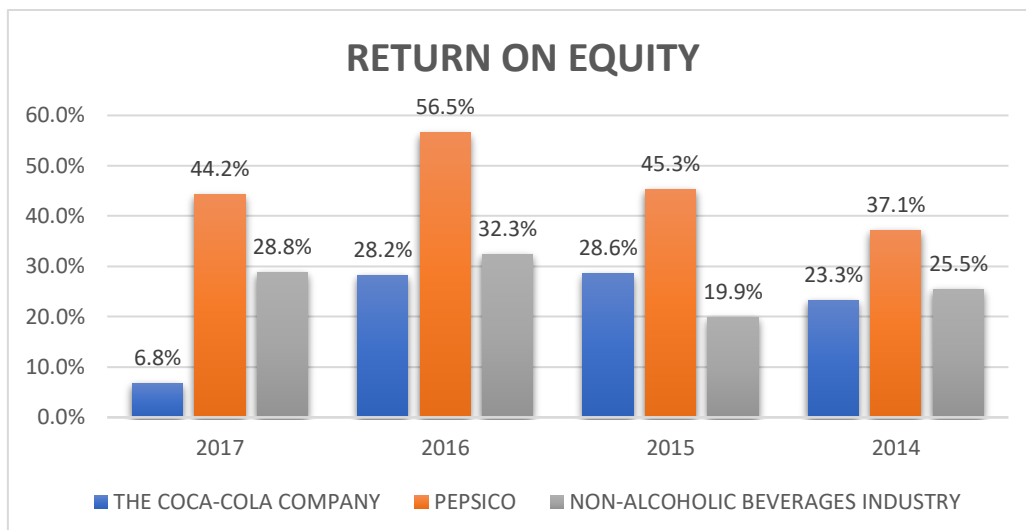


Table 19- Return on equity

The return on equity graph shows how Pepsi has the highest ROE every year. Coca-Cola is generally around the sector average, but it goes down in the last year due to the regulatory reasons explained in section 1.4. It can be concluded that Coca-Cola's generates a lower return on their owner's investment than Pepsi does. Compared to the industry they are generating a similar return, so this is not a problem for Coca-Cola, is an advantage for Pepsi, as this means that Pepsi is more efficient at the time of using their owners' resources. This does not mean that Pepsi's owners will see a higher part of their investment on profits at the end of the year, as this will depend on the retained earnings that the company decides to keep and reinvest.

- The ROIC (Return on Invested Capital) ratio refers to the net income generated during the period with the sources of financing of the company on the long term (long term liabilities and equity). It is used to see the return that the company is able to generate for their funders, partners and stable financial creditors. Therefore, the ratio will be net income divided by the sum of long-term debt and equity (Sanz 2014).

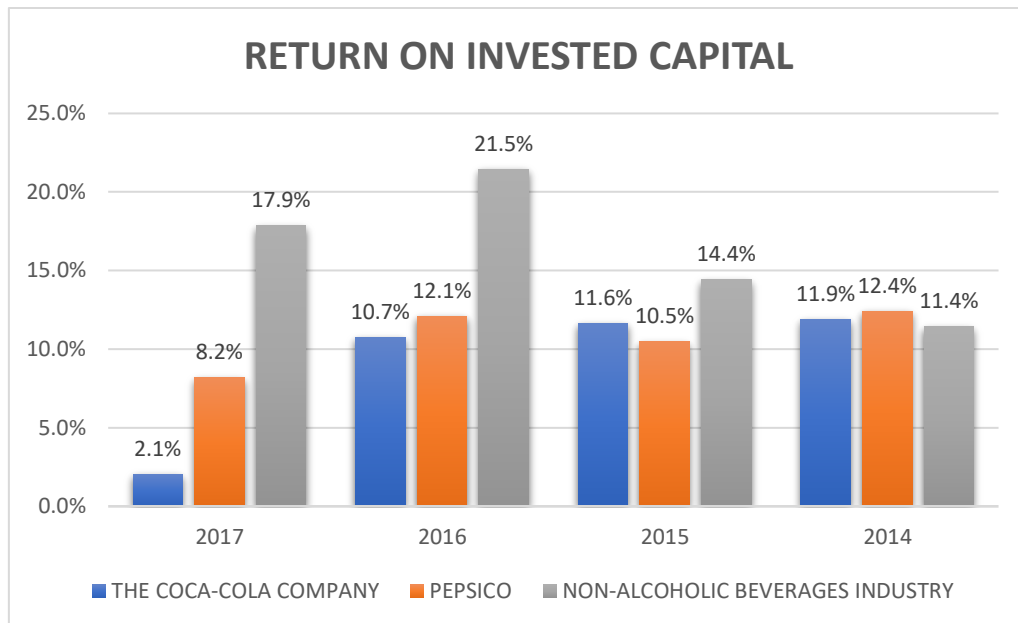


Table 20- Return on invested capital

The return on invested capital ratio shows a big volatility in the industry but is more stable in Coca-Cola and Pepsi. In 2017 there is a big decrease on the ROIC due to regulatory reasons explained at section 1.4. Pepsi and Coca-Cola have very similar ROIC ratios through the years and are also very close to the benchmark in the years 2014 and 2015 but are clearly under it after 2015. After 2015, Coca-Cola and Pepsi have not been generating the appropriate return compared to their long-term financing. This is a concern because if a long time passes that they cannot to keep up with the level of profit that long-term financing requires, it will result in a solvency problem.

### 4.3 Solvency and Debt Ratios

Solvency and debt ratios are trying to analyze the financial situation on the long-run, trying to evaluate how able is the company to pay their long-term debt. A long-term equilibrium position requires the existence of a synchrony between recovery of investments and payment of liabilities. Due to the close relationship that there is between returns and solvency, at the time of analyzing this variable, the focus on solvency must be on the capacity of the company to keep generating stable returns on the long-run. Without generating stable returns the company will not be able to pay their debt on the long-run and will incur into solvency problems (Merchante 2011).



- The debt to equity ratio expresses the proportion that the liabilities have over the companies own resources. The bigger this ratio is the bigger the risk the creditors will have and the smaller the ratio is, the more risk the company owners have. Its calculated by dividing equity by liabilities (Merchante 2011).

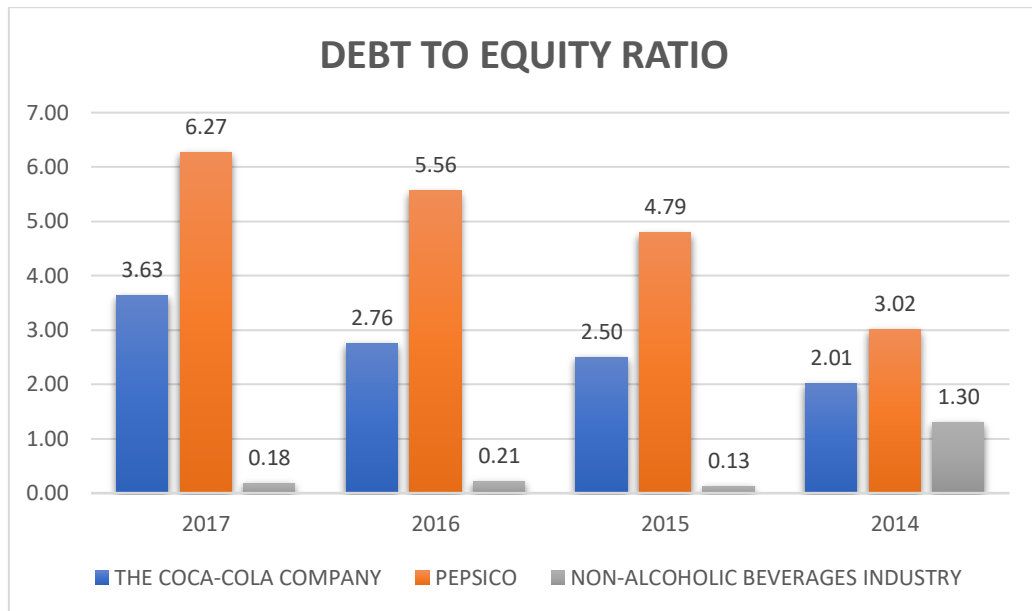
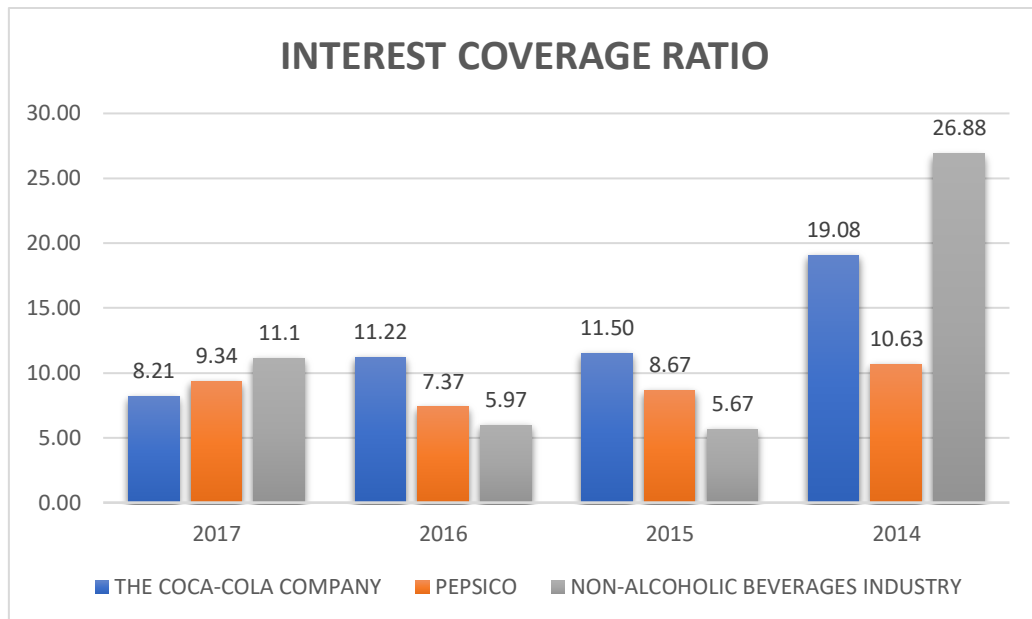


Table 21- Debt to equity ratio

In this graph, it's clear that both The Coca-Cola Company and PepsiCo are above the industry average, one of the reasons is that these two companies are the biggest in the sector and have more possibilities to get funds from external creditors. In relation with the industry, a bigger part of the risk is on creditors in Coca-Cola and Pepsi. In the case of Pepsi, the risk for creditors is almost double that of Coca-Cola, as Coca-Cola's equity represents a larger percentage of their liabilities and equity.

- The interest coverage ratio is one way of evaluating the risk that creditors are exposed to. This ratio compares the interests the company has paid in the current accounting year with the EBIT (earnings before interest and taxes). This way it's possible to evaluate the capacity of the firm to be able to pay the cost of debt with their yearly earnings. The lower this rate is, the higher interests the company will be paying for their EBITDA. This ratio is calculated by dividing EBITDA by interests (Merchante 2011).



*Table 22- Interest coverage ratio*

The industry interest coverage ratio varies a lot through the years, being at the beginning above both companies, in 2015 and 2016 under them, and again, in 2017 above them. This means that Coca-Cola and PepsiCo are paying more interest on their outstanding debt than the industry is. All of the companies and the industry are above one, which means they always have enough funds to pay for their interests. By analyzing the graph, it can be concluded that Coca-Cola and Pepsi are generally solvent, as they have stability through the years, but it is clear that the first year was not good enough for them as the market clearly outperformed them. It is important to consider that in Coca-Cola's case, the company is slowly having a decreasing interest coverage ratio every year, being outscored by both the benchmark and Pepsi in 2017. If this trend keeps going it will be very dangerous in the future and the company will have serious solvency problems.

- The equity multiplier or financial leverage ratio measures the portion of a company's assets that are financed through equity. This ratio is used to indicate the level of debt financing that the company has, a higher multiplier indicates that a significant portion of a firm's assets are financed by debt, while a low multiplier shows that either the firm is unable to obtain debt from lenders, or the managers are avoiding the use of debt to purchase assets. It's calculated by dividing assets by equity (Institute s.f.).

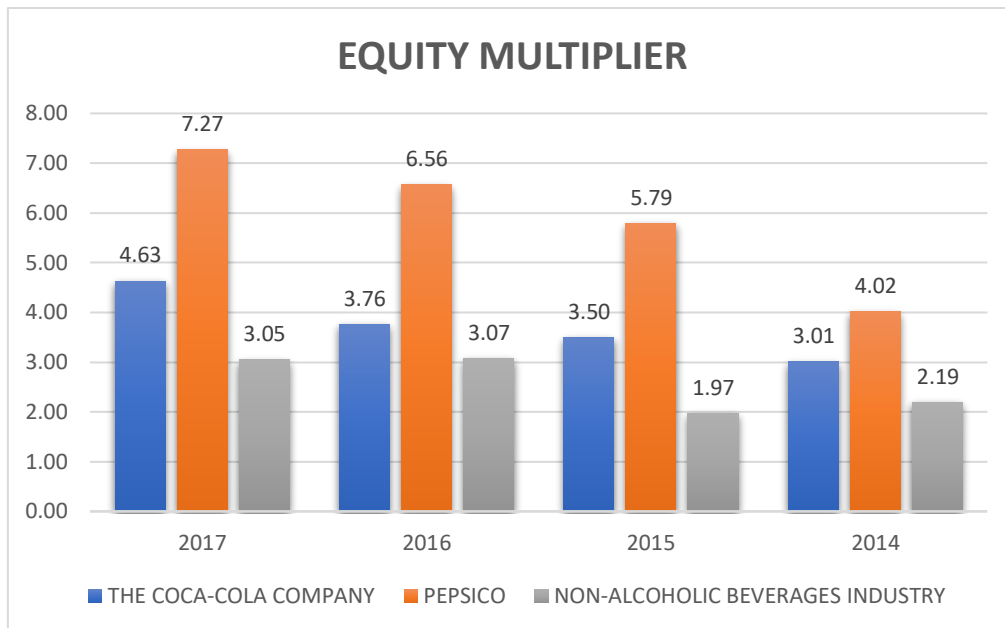


Table 23- Equity multiplier

In this graph it can be seen that Pepsi has the biggest equity multiplier, which means that a higher portion of the firm's funding is financed by debt. Coca-Cola also has a higher equity multiplier than the sector, so their funding will also include a larger external debt. This makes Coca-Cola and Pepsi be able to grow quicker than other companies on the sector, but also implies a higher external risk and it can be dangerous if it's not managed well. One of the reasons the two companies' equity multiplier is higher than the sectors is because they are large well-trusted companies, therefore is easier for them to get funding from banks, private investors and any other funding provider.

Unfortunately, it wasn't possible to obtain the following solvency and debt industry ratios, so from now on, the rest of solvency and debt ratios are only going to be compared between the two companies being analyzed in this paper.

- The capital-debt ratio is the opposite than the debt to equity ratio, as it measures the degree of dependence on out of the company financing. The higher this ratio is, the lower the insolvency risk is. Although this might also mean that their owners are wasting the chance to grow at a faster pace and get higher earnings through obtaining external financing. This ratio is calculated by dividing equity by liabilities. (Merchante 2011)

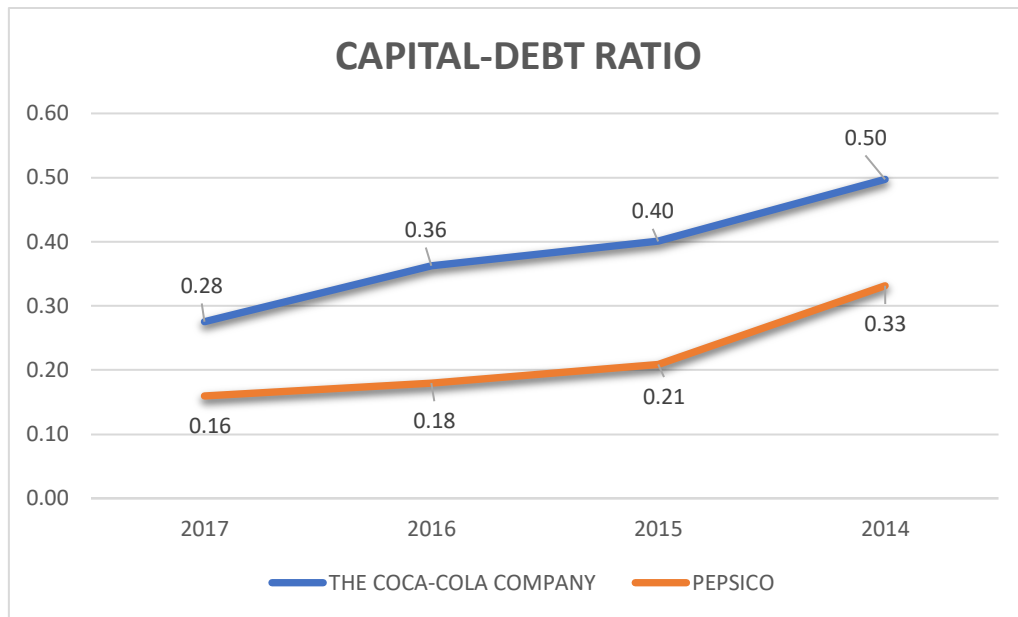
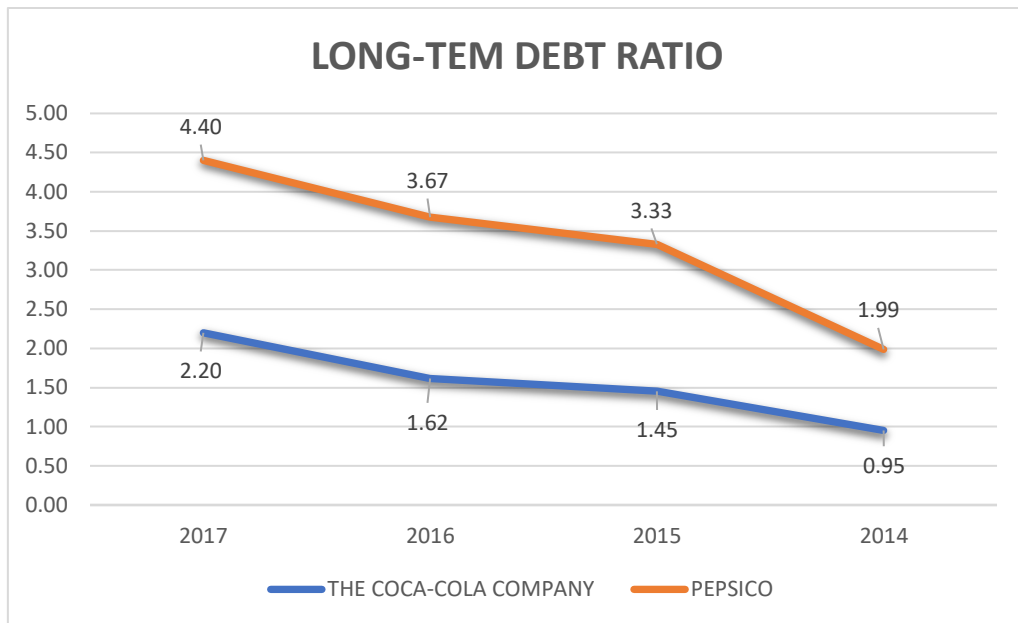


Table 24- Capital debt ratio

In this graph is possible to see how Coca-Cola has a higher capital-debt ratio, which in essence means that a bigger part of their funding is through internal funding. Both companies' capital-debt ratio is decreasing and has decreased around 50%. This means that the two companies have been growing through external financing in the last years.

- The long-term debt ratio or solvency long-term ratio expresses the relationship between equity and long-term debt and is used to determine the leverage that a business has taken on. Generally, if the value is high, it means that the company is financing, with stable resources, their total fixed structure. If the value is too high, however, it implies that the business has a greater risk of bankruptcy, since it may not be able to pay for the interest expense on debt if its cash flows decline, this tends to be a problem in periods where interest rates are increasing or when the cash flows of the company vary a lot. To calculate this ratio long-term debt has to be divided by equity. (Bragg 2018)



*Table 25- Long term debt ratio*

The graph shows how Coca-Cola and Pepsi have both been increasingly financing their investments with long-term debt rather than equity. At the beginning, Coca-Cola had a very low long-term debt ratio, which would have compromised the company's stability if short-term liabilities were too high.

- The short-term debt ratio or solvency short-term ratio expresses the relationship between equity and short-term debt, the higher this ratio is, the lower chances of being able to pay their short-term debt interests the company has. On the other hand, if this ratio is too low the company might not be using their investment possibilities correctly which can mean a lower growth rate. (Bragg 2018)

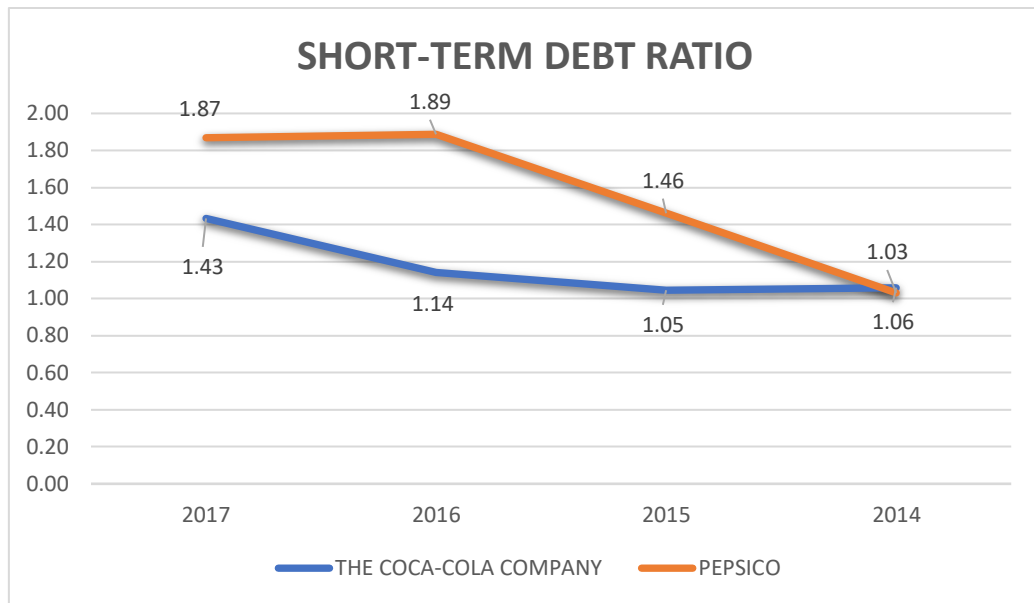


Table 26- Short term debt ratio

In this case, Coca-Cola and Pepsi's short-term debt ratio were the same in 2014, but since 2014, Pepsi's ratio has been growing at a faster pace than Coca-Cola, which means higher current liabilities compared to their equity.

#### 4.4 Liquidity Ratios

The main objective of liquidity ratios is to evaluate the capacity of the company to attend its liabilities on the short-run, conventionally the short-run is the period up to twelve months, so liquidity ratios are basically evaluating the capacity of a company to pay its debts in the following twelve months. There is not a rule that states that a certain liquidity position is better than another, each company will have an optimum level of liquidity that will depend on how their expenses and earnings are structured. The best way to evaluate the level of liquidity is to compare the company ratios to the industry ratios. An equilibrated short-term financial position requires a correlation between the investments realized and the funding sources used, so that the payments and the collections are always in the same line.

- The working capital expresses the simplest relation between assets and liabilities in the short-term. The higher the value of working capital is, the lower the company's liquidity risk is, but at the end, there is a lot of other factors that come into play and will determine if the company is liquid. Factors such as what are the current assets financed with or what are the

current assets and liabilities composed of. The working capital will be the difference between current assets and current liabilities. (Jerry Weygandt s.f.)

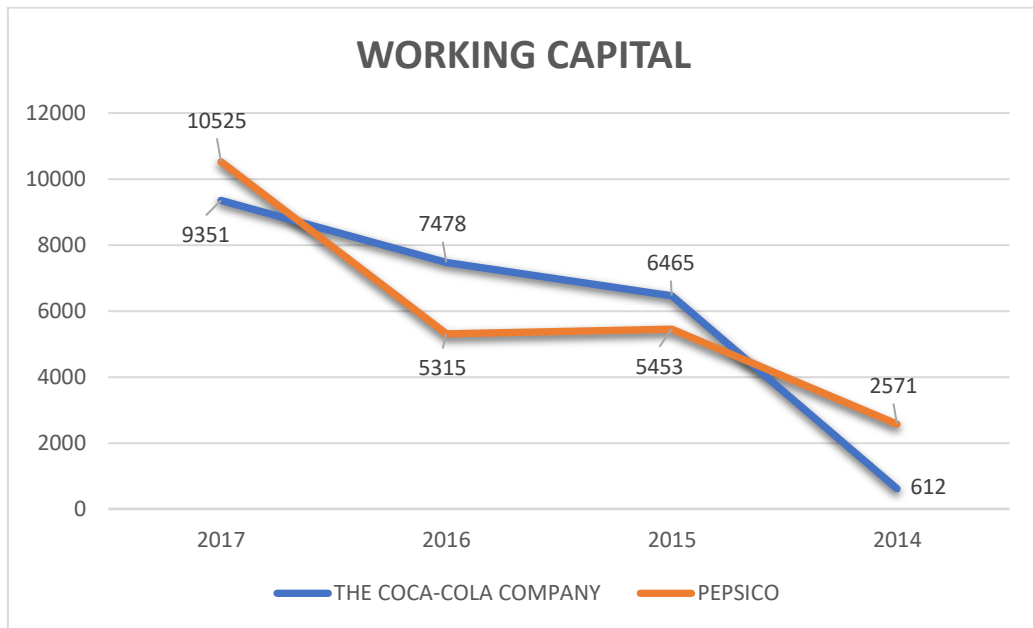
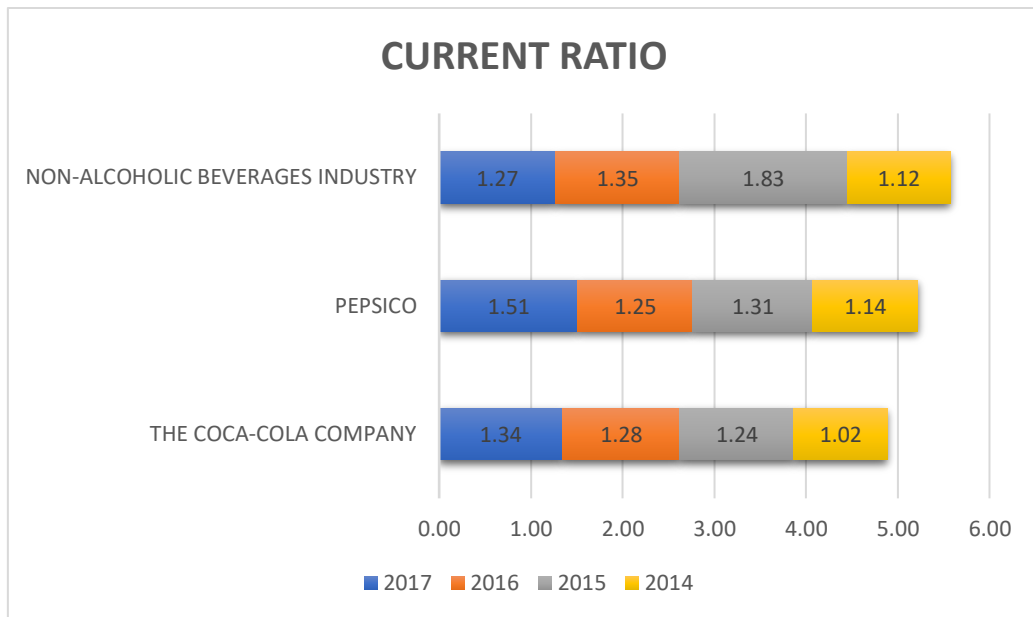


Table 27- Working capital

The working capital is always positive for both companies, this means that current liabilities are always smaller than their current assets, and therefore, in theory, can be paid with current assets at any time. But, as it was explained before, in reality, this graph doesn't mean that both are actually liquid. There is an increasing trend in the working capital for both companies, as the working capital increases every year for Coca-Cola and every year, except 2016, for Pepsi.

- The current ratio expresses the percentage of the working capital and as the working capital is a measure used to evaluate a company's liquidity and short-term paying ability. It allows investors to see how safe it will be to invest in the short-term in the company. If the ratio is not over 1, the company will not be able to meet their short-term obligations and, therefore, will have to ask for funding to meet them or earn profits before they are due to. Current ratio is calculated by dividing current assets by current liabilities. (Jerry Weygandt s.f.)

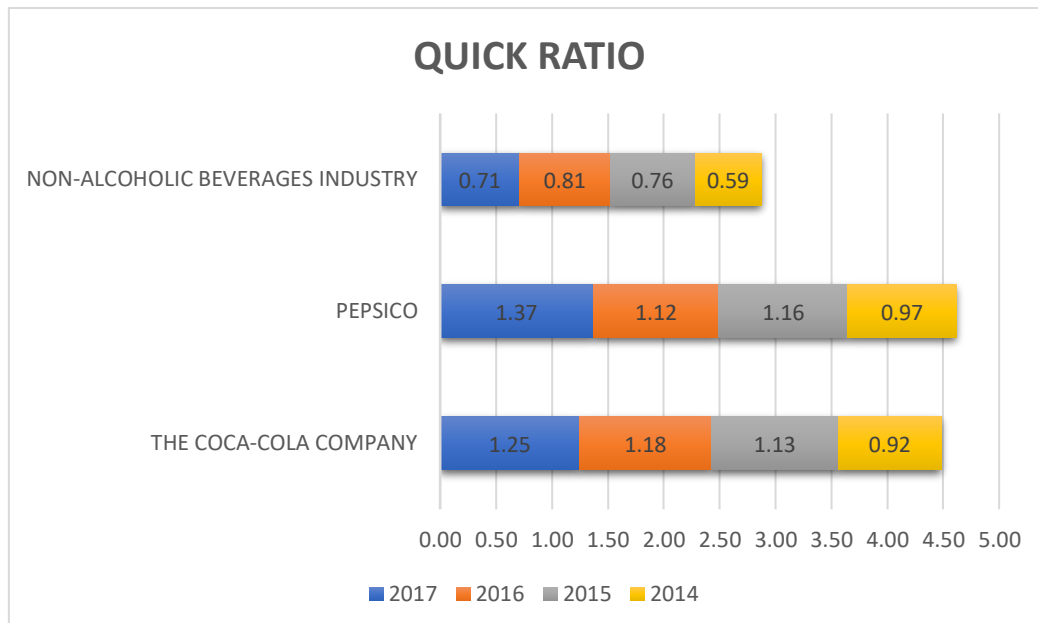


*Table 28- Current ratio*

The current ratio analysis indicates that Coca-Cola, Pepsi and the industry are all able to meet their short-term obligations. In this case Coca-Cola and Pepsi are under the industry overall. This indicates an overall weakness at the time of paying their short-term liabilities. But, although the two companies are far under the industry in 2014, they end up being above the benchmark in 2017, when Pepsi's current ratio is 1.51 and Coca-Cola's 1.34; while the market's is only 1.27.

- The quick ratio or acid test measures the ability of the company to pay its short-term liabilities using the most liquid current assets (all of the current assets except inventories). Quick ratio's interpretation is closer to reality than the current ratio as only assets that could actually be used to pay liabilities at any time are used. The higher the ratio is the more liquid the company is, and the less probability that there is of not paying their debts in the short-term. This ratio is calculated by subtracting inventories to the total current assets and dividing the result of this operation by current liabilities. (Merchante 2011)





*Table 29- Quick ratio*

In this graph, the most liquid companies are Coca-Cola and Pepsi, the industry is clearly under both companies. This means that Coca-Cola and Pepsi both have less risk for investors in the short-term. In the current ratio graph the industry had a higher ratio, which leads to think that the industries inventory is very big as it will account for the difference between the industry's current ratio and their quick ratio. If only Coca-Cola and Pepsi are compared, Pepsi has a higher quick ratio overall but both companies are very similar and have close quick ratios.

- The receivable turnover ratio and days receivables measures how quickly can a company convert certain assets to cash. In particular how liquid are accounts receivables. Measuring the average number of times that a company collects their receivables. This will provide insight into the operational structure. Accounts receivables turnover ratio is computed by dividing sales by the average accounts receivable. On the other hand, the days receivables, or average collection period, is a variant of the receivables turnover that will determine the average number of days that a company takes to collect their receivables and is calculated by dividing 365 by the receivable turnover ratio. The higher the days receivables and the lower the receivable turnover, the more compromised the company's ability to make interest payments is and the more chances they have of

running into liquidity problems. (Jerry Weygandt s.f.) (C. William Thomas s.f.)

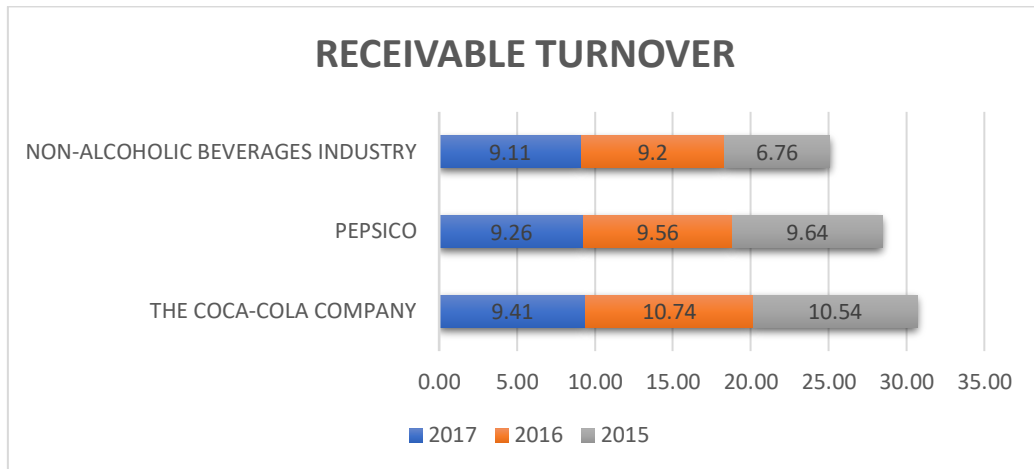


Table 30- Receivable turnover

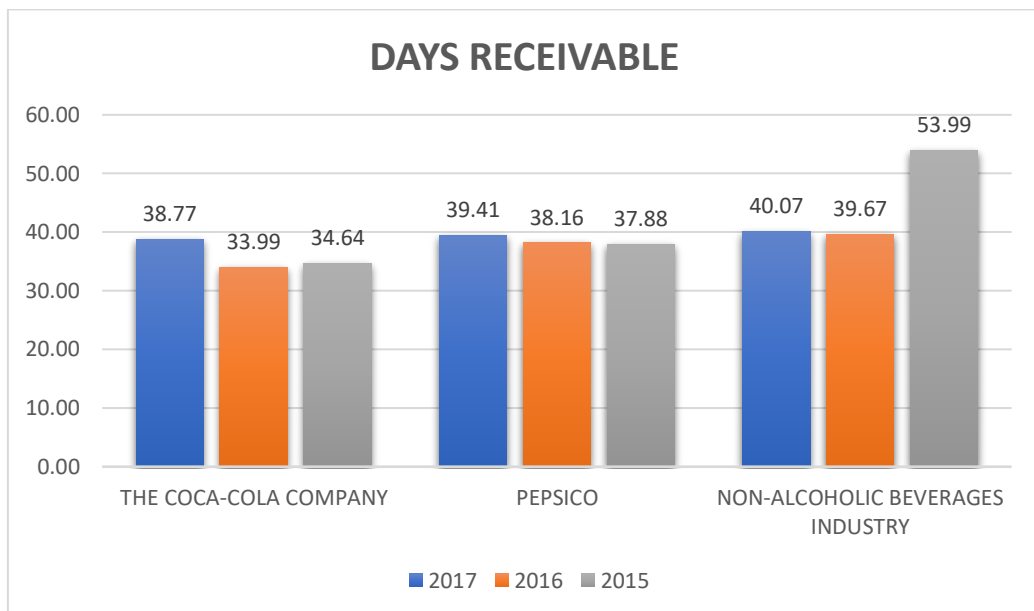


Table 31- Days receivables

In this graph, it can be seen that Pepsi's receivable turnover ratio is over Coca-Cola's, which indicates more sales on credit. The industry is over both companies. Therefore, it can be concluded that Pepsi has more credit sales than Coca-Cola proportionally, while the industry has more credit sales than both. This means higher earnings with interest revenues, but also a higher chance of not being able to pay back short-term debtors. As the industry has more credit sales, the time it takes for them to recover the credit lend is longer than for the companies being studied. The difference

between Coca-Cola and Pepsi is very small and won't make a big difference in this aspect.

- Payables turnover and days payables are the measures to see how the company buys their raw materials on credit and how much time does it take to pay them back. A high payable turnover ratio means that a business pays its suppliers very quickly, and a lower ratio means a longer time period for payments to suppliers. Payable turnover is calculated by dividing COGS by the average account payable. On the other hand, the days payable is calculated by dividing 365 by the payable turnover. (C. William Thomas s.f.)

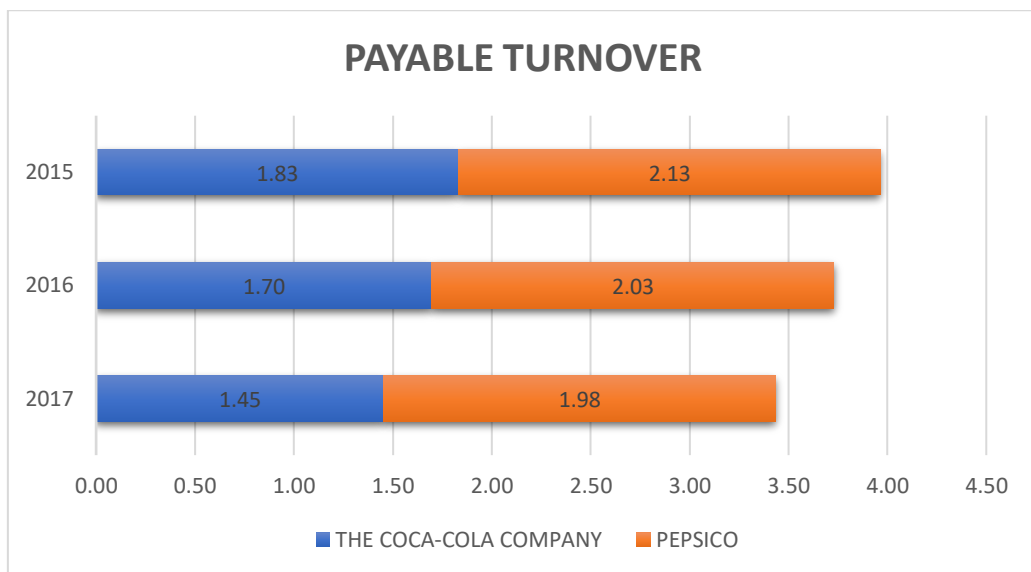


Table 32- Payable turnover

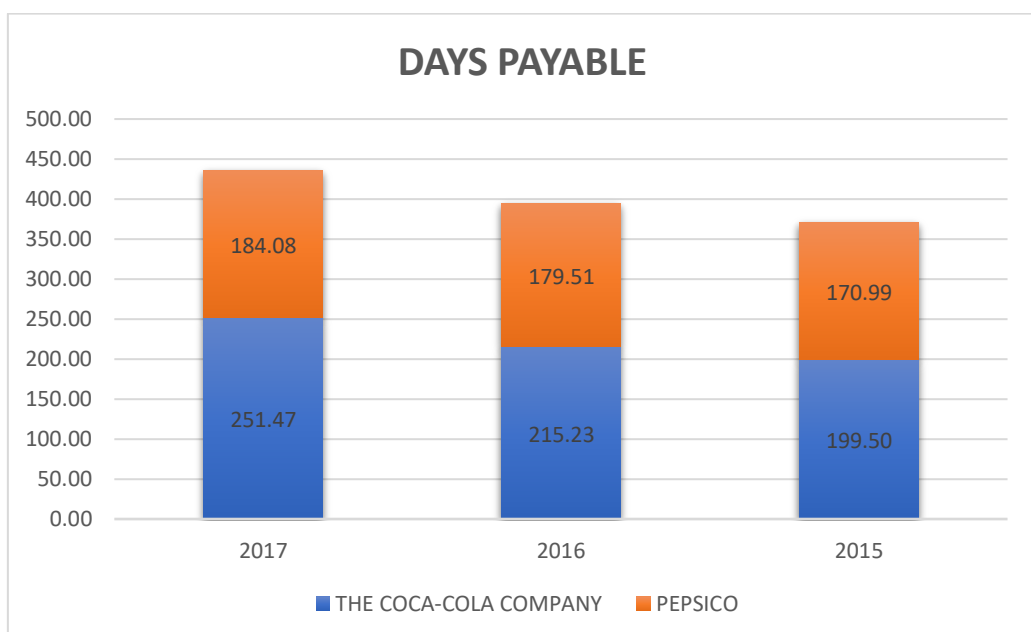


Table 33- Days payable

The payable turnover ratio, in this case, is higher for Pepsi, which means that Pepsi takes less time to pay suppliers than Coca-Cola. The payable turnover decreases every year, and therefore, the days payable, increases from year to year, meaning that both companies are taking more time to pay their suppliers as the years increase.

#### **4.5 Cash Flow Analysis**

The cash flow statement analysis highlights important trends at the time of making and receiving payments. Pepsi's cash flow investing activities have a negative result, making more payments for new investments than investments that were sold or reached maturity for every year. In the case of their financing activities, Pepsi issued more long-term debt than the debt paid every year, something, of course, not sustainable in the long-run except for in a company that grows every year, which is not the case in the years being analyzed. On the other hand, Coca-Cola, also had negative investing activity every year, in which investment purchases and income from investments disposals are more less the same, but properties purchased are greater than the ones sold. As well, Coca-Cola makes a big investment in equity methods of investment while Pepsi doesn't. The financing activity is also similar to Pepsi, Coca-Cola issues more long-term debt every year than the long-term debt paid, but the amounts of debt that Coca-Cola issues and pays are much bigger than Pepsi's, as the amounts are around four times bigger.

### **5. CONCLUSIONS**

After analyzing The Coca-Cola Company and PepsiCo, and comparing them to the industry ratios, there are a couple of conclusions that can be drawn. The first and most obvious conclusion is that Coca-Cola and Pepsi have had decreasing revenues and a decreasing net income since the year 2014. This can be seen in the horizontal analysis done in section 3.1. This is due to different factors, but the main factor is the decreasing demand for carbonated drinks. The carbonated drinks Coca-Cola and Pepsi represent one of the main products for both companies, as according to an article that Kate Taylor wrote on the website business insider: *"Coke and Pepsi brands declined 2% and 4.5%, respectively, by volume in the US in 2017, according to Beverage Digest's annual report, which*

*was released on Monday. Meanwhile, Aquafina increased 2.6% by volume and Poland Springs grew 2.5%.*

*Overall, the carbonated-soft-drink category declined 1.3% by volume, while bottled water grew 6.2%. The rise of bottled water has been a long time coming. After a decades-long growth streak, bottled water sales by volume finally surpassed sales of soft drinks in 2016, reaching 12.8 billion gallons, according to research and consulting firm Beverage Marketing Corporation.” (Taylor 2018)* CSDs (Carbonated Soft Drinks) are decreasing in volume due to people realizing health issues with the consumption of this type of product and increasing regulations. This space left in the market due to the decrease in CSDs has been taken by other drinks, such as bottled water, ready-to-drink coffee, or energy drinks as it was explained in section 1.3. This CSD’s volume decline is having a smaller effect in Pepsi because of their higher diversification.

Furthermore, both companies’ equity has been decreasing since 2014, while non-current liabilities are increasing. There is also a growth in non-current assets for both companies, that is financed through long-term debt as it grows for both companies. Pepsi’s current assets increase is bigger than Coca-Cola’s and is partly financed with current liabilities, while Coca-Cola’s is entirely financed with new non-current liabilities. This can be seen in the balance sheet’s horizontal analysis at section 3.1

Other anomaly found at the time of doing the horizontal and vertical analysis was the taxes and interests increase that led to a lower net income in 2017 for both companies while revenues and expenses remained the same or more less similar. This anomaly was concluded to be due to a tax increase in 2017 that has its origins in a tax reform act, called TCJ, that, in essence, gave an incentive to international US companies to repatriate profits from other years.

Lastly, the vertical analysis showed how Pepsi’s cost of goods sold are much higher than Coca-Cola’s, this explains why Pepsi, despite having higher revenues every year, doesn’t have a very big difference in their net income when comparing it with Coca-Cola’s. This was also seen in 4.2, at the time of obtaining the gross margin and EBITDA margin, it was seen that both ratios were higher for Coca-Cola having a very big difference against Pepsi, Coca-Cola’s gross margin and EBITDA margin being 62.6% and 23.1% respectively and Pepsi’s 54.7% and 16.5% on 2017. These ratios were better for Coca-Cola every year. The industry

did have a higher EBITDA margin than Coca-Cola in 2017 but was very unstable and had two years with an EBITDA ratio under 12%. This is also the case when analyzing the return on sales ratio, where Coca-Cola is over Pepsi and the industry, while the sector and Pepsi are at a similar rate, Pepsi being slightly under. Therefore, it can be concluded that Coca-Cola is more efficient than Pepsi at the time of managing their production costs.

In regard to how Coca-Cola manages to have lower costs than the industry and Pepsi, Coca-Cola explains in their 2017 annual report: *“As a result of our finished goods operations, which are primarily included in our North America and Bottling Investments operating segments, the following inputs represent a substantial portion of the Company's total cost of goods sold: (1) sweeteners, (2) metals, (3) juices and (4) PET. The Company enters into hedging activities related to certain commodities in order to mitigate a portion of the price risk associated with forecasted purchases. Many of the derivative financial instruments used by the Company to mitigate the risk associated with these commodity exposures, including any related foreign currency exposure, do not qualify for hedge accounting. As a result, the changes in fair value of these derivative instruments have been, and will continue to be, included as a component of net income in each reporting period. The Company recorded gains related to these derivatives of \$14 million and \$79 million during the years ended December 31, 2017 and December 31, 2016, respectively, and recorded a loss of \$206 million during the year ended December 31, 2015 in the line item cost of goods sold in our consolidated statements of income.”* Explaining that one of the causes that allows for Coca-Cola's lower production costs is their exposure to commodities used in production. Something that is not common in this sector.

On the other hand, there are other ratios that concluded that Coca-Cola, while being better at production efficiency, are not as good at managing their assets efficiency. Their asset turnover ratio was under the industry's average and under Pepsi's. In this measure, Pepsi had the best ratio, and was over both, Coca-Cola and the industry, for every year. This means that Coca-Cola's assets are not being translated into revenues as well as they should. Pepsi's assets however, are translating well into revenues. When looking at both companies' asset distribution, there is a big difference between both, as Coca-Cola has around 25% of their assets in an account called “Equity Method Investment” which, in

essence, is equity investment, and accounts for Coca-Cola's investments in other companies that Coca-Cola has stake in. Companies such as "Monster Beverage Corporation" or "Coca-Cola Enterprises", a company that was part of Coca-Cola until the late 20th century.

When looking at Coca-Cola's return on assets, is very similar to Pepsi's and the industry's every year, slightly better in 2015 and slightly worse in 2014 and 2016, for the year 2017 the reference ratio obtained is unrepresentative as net income was influenced by the TCJ act. When comparing the revenues with the assets, Coca-Cola's assets didn't get translated into revenues as well as Pepsi's or the industry's assets did, but when comparing the net income to the assets, their assets do get translated into profits. Moreover, the return on equity analysis obtained determined increasing equity returns for both companies as they are reducing their equity every year and financing their new investments with debt. Pepsi is above the industry average and Coca-Cola has a similar return on assets to the industry. In the case of invested capital, the return on invested capital ratio is similar for Coca-Cola and Pepsi every year, again, not considering 2017, but the industry is clearly over both companies every year, what determines that the industry obtains its financing through current liabilities more than Coca-Cola as their return on equity was very similar. The analysis of these profitability ratios is exposed in section 4.2.

Going on to the solvency and debt ratios, the main conclusion is that Coca-Cola and Pepsi cover less of their interest expense with their profits than the industry does. This is because the industry relies more on equity to grow while Coca-Cola and Pepsi rely on debt, this can be seen in the debt ratio, which is very low for the industry compared to these companies. Pepsi uses the most debt to grow. This can also be seen in the equity multiplier, which again, shows how Pepsi has the highest equity multiplier, being this 7.27 in 2017, while that same year Coca-Cola had a 4.63 and the industry had a 3.05 on their equity multiplier ratio. All these ratios show that Coca-Cola and Pepsi are less solvent than the industry but will be able to grow at a faster pace in the long-run as they are also getting funding from external funding providers. One of the reasons why Coca-Cola and Pepsi use more external debt to grow than the industry is due to the financing possibilities that these companies have as they are big companies with a good reputation and years of experience in the sector, which leads to them getting

lower interest rates from banks and any other funding providing institution. The solvency and debt ratios are found in section 4.3.

Lastly, the liquidity ratios gave a different view over the ability of the two companies and the industry to pay short-term debt. The industry did have a higher current ratio than Coca-Cola and Pepsi from the years 2014 to 2016 but a lower quick ratio for every year analyzed, which means that they had a higher inventory compared to their current assets than Coca-Cola and Pepsi. If the industry was able to sell all of their inventory whenever they wanted they would be more liquid than the companies analyzed in this paper, but since this is not possible, it can be concluded that Coca-Cola and Pepsi are more liquid than the industry, and therefore, have more chances of being able to pay their short-term debt with their most liquid current assets. Liquidity ratios are analyzed at section 4.4.

To conclude, The Coca-Cola Company and PepsiCo are the biggest companies in the sector but still have things to improve and could learn from each other as both companies' financial statements have some ratios that are situated under the benchmark and under their competitor. The growth of Coca-Cola's and Pepsi's financial statements will be determined by how they manage to maintain their competitive advantage while overcoming the decrease in the revenues of carbonated soft drinks and the increased regulations of the industry.

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