

Financial Analysis

Coca-Cola

2020  2021

Financial Management

Financial Statement Analysis

Fall 2022



Lucy Savannah Wildman Berry

and Marianne Proops

Table of Contents

Introduction	4
Coca-Cola	5
Pepsi-Co	5
Balance Sheets	
Coca-Cola	
Trend Analysis [y to y]	6
Vertical Analysis	7
Pepsi-Co	
Trend Analysis [y to y]	8
Vertical Analysis	9
Income Statements	
Coca-Cola	
Trend Analysis [y to y]	10
Vertical Analysis	11
Pepsi-Co	
Trend Analysis [y to y]	12
Vertical Analysis	13
Ratio Analysis	14
Liquidity Ratios	15
Current Ratio	16
Acid Test Ratio	17
Asset Management Ratios	18
Inventory Turnover	19
Days Sales Outstanding	20
Total Asset Turnover	21
Capital Structure Ratios	22
Debt Ratio	23
Financial Leverage	24
Times-Interest-Earned	25
Profitability Ratios	26
Gross Profit Margin	27
Net Profit margin	28
Basic Earning power	29
Return on Total Assets	30
Return on Equity	31
The DUPONT Equation	32
Coca-Cola	33
Pepsi-Co	
Conclusion	35

Background

PepsiCo and Coca-Cola are both multinational beverage and snack companies headquartered in the United States. PepsiCo is best known for its flagship product, Pepsi, while Coca-Cola is best known for its flagship product, Coca-Cola.

In terms of product offerings, both companies offer a wide range of carbonated and non-carbonated beverages, as well as snacks. PepsiCo has a greater focus on snack products, while Coca-Cola has a greater focus on beverages.

In terms of competitors, both companies face competition from other beverage and snack companies such as Dr. Pepper Snapple Group and Mondelez International. However, PepsiCo and Coca-Cola are the main competitors for each other in the beverage industry.

In terms of financial policies, both companies have a focus on maintaining a strong balance sheet and generating consistent cash flow. Both companies pay dividends to shareholders and have a history of share buybacks. However, PepsiCo has a greater focus on investing in innovation and marketing to drive growth, while Coca-Cola has a greater focus on expanding into emerging markets.

Coca-Cola

The Coca-Cola Company is a global beverage company that produces, markets, and sells a range of non-alcoholic beverages. The company is known for its flagship product, Coca-Cola, but it also offers a range of other products, including sparkling beverages, waters, juices, teas, and sports drinks. The Coca-Cola Company operates in over 200 countries and has a diverse portfolio of more than 500 brands.

The company's main competitors include PepsiCo, Dr. Pepper Snapple Group, and Nestle. The Coca-Cola Company's financial policies focus on maintaining a strong balance sheet, generating long-term shareholder value, and investing in growth opportunities. The company has a history of steady dividend growth and has consistently returned value to shareholders through share buybacks and dividends.

Pepsi-Co

PepsiCo is a multinational beverage and snack company headquartered in New York. The company is best known for its flagship product, Pepsi, which is a carbonated soft drink. In addition to Pepsi, the company also produces other well-known brands such as Mountain Dew, Lay's, and Gatorade.

PepsiCo's main competitors in the beverage industry include Coca-Cola and Dr. Pepper Snapple Group. In the snack industry, it competes with companies such as Mondelez International and Mars.

PepsiCo follows a disciplined financial policy, with a focus on maintaining a strong balance sheet and generating consistent cash flow. The company consistently pays dividends to its shareholders and has a history of share buybacks. It also invests in innovation and marketing to drive growth and maintain its market share in the highly competitive beverage and snack industries.

Balance Sheets

Coca-Cola

Trend Analysis

CONSOLIDATED BALANCE SHEETS - USD (\$) \$ in Millions			Trend Analysis	Trend Analysis	Vertical Analysis	Vertical Analysis
	2021	2020	(\$ value)	(% change)	2021	2020
Cash and cash equivalents	\$ 9 684	\$ 6 795	\$ 2 889	43%	9,74%	12,85%
Short-term investments	1 242	1 771	\$ (529)	-30%	75,97%	49,29%
Total Cash, Cash Equivalents and Short-Term Investments	10 926	8 566	\$ 2 360	28%	8,64%	10,19%
Marketable securities	1 699	2 348	\$ (649)	-28%	55,54%	37,18%
Trade accounts receivable, less allowances of \$516 and \$526, respectively	3 512	3 144	\$ 368	12%	26,87%	27,77%
Inventories	3 414	3 266	\$ 148	5%	27,64%	26,73%
Prepaid expenses and other current assets	2 994	1 916	\$ 1 078	56%	31,51%	45,56%
Total Current Assets	22 545	19 240	\$ 3 305	17%	4,19%	4,54%
Equity method investments	17 598	19 273	\$ (1 675)	-9%	5,36%	4,53%
Other investments	818	812	\$ 6	1%	115,35%	107,51%
Other noncurrent assets	6 731	6 184	\$ 547	9%	14,02%	14,12%
Deferred income tax assets	2 129	2 460	\$ (331)	-13%	44,32%	35,49%
Property, plant and equipment — net	9 920	10 777	\$ (857)	-8%	9,51%	8,10%
Trademarks with indefinite lives	14 465	10 395	\$ 4 070	39%	6,52%	8,40%
Goodwill	19 363	17 506	\$ 1 857	11%	4,87%	4,99%
Other intangible assets	785	649	\$ 136	21%	120,20%	134,51%
Total Non-Current Assets	71 809	68 056				
Total Assets	94 354	87 296	\$ 7 058	8%	1,00%	1,00%
CURRENT LIABILITIES						
Accounts payable and accrued expenses	14 619	11 145	\$ 3 474	31%	6,45%	7,83%
Loans and notes payable	3 307	2 183	\$ 1 124	51%	28,53%	39,99%
Current maturities of long-term debt	1 338	485	\$ 853	176%	70,52%	179,99%
Accrued income taxes	686	788	\$ (102)	-13%	137,54%	110,78%
Total Current Liabilities	19 950	14 601	\$ 5 349	37%	4,73%	5,98%
Long-term debt	38 116	40 125	\$ (2 009)	-5%	2,48%	2,18%
Other noncurrent liabilities	8 607	9 453	\$ (846)	-9%	10,96%	9,23%
Deferred income tax liabilities	2 821	1 833	\$ 988	54%	33,45%	47,62%
Total Liabilities	69 494	66 012	\$ 3 482	5%	1,36%	1,32%
THE COCA-COLA COMPANY SHAREOWNERS' EQUITY						
Common stock, \$0.25 par value; authorized — 11,200 shares; issued — 7,040 shares	1 760	1 760	\$ 0	0%	53,61%	49,60%
Capital surplus	18 116	17 601	\$ 515	3%	5,21%	4,96%
Reinvested earnings	69 094	66 555	\$ 2 539	4%	1,37%	1,31%
Accumulated other comprehensive income (loss)	-14 330	-14 601	\$ 271	-2%	-6,58%	-5,98%
Treasury stock, at cost — 2,715 and 2,738 shares, respectively	-51 641	-52 016	\$ 375	-1%	-1,83%	-1,68%
Equity Attributable to Shareowners of The Coca-Cola Company	22 999	19 299	\$ 3 700	19%	4,10%	4,52%
Equity attributable to noncontrolling interests	1 861	1 985	\$ (124)	-6%	50,70%	43,98%
Total Equity	24 860	21 284	\$ 3 576	17%	3,80%	4,10%
Total Liabilities and Equity	\$ 94 354	\$ 87 296	\$ 7 058	8%	1,00%	1,00%

Overall during 2020 and 2021, The Coca-Cola Company performed well and grew their assets faster than their liabilities. There was growth particularly in cash holdings, goodwill and trademarks. But there was a reduction in plant, property, and equipment. This signals that they were seeking stability rather than growth. They financed a growth of cash and cash equivalents with a lot of short term debt, shying away from long term liabilities.

Over the two year period The Coca-Cola Company paid off a lot of long-term debts. There was a drop in investment levels, particularly in equity method investments, as the company tried to maximize the growth of its shareholder's equity and reinvested earnings.

During 2020 and 2021, The Coca-Cola Company went through a period of repositioning their finances to restabalize the brand and growth of equity after the 2020 market crash. They are being more conservative as they tried to return volumes back to pre-Covid levels, paying off debts, buying up value adding assets rather than PPE , and growing equity and reinvested earnings.



Vertical Analysis

The largest change in how The Coca-Cola company was spending its money in 2020 versus 2021 was the percentage of their assets they reinvested into short-term investments. This value went from 76% to only around 50%, this change implies that Coca-Cola either gave out an unusual amount of short-term loans in 2020 or they decided that it was a bad strategy.

Their loans and notes payable became a larger percentage of their spending as did current maturities of long-term debt. It appears that in 2021 The Coca-Cola Company made a conscious effort to pay off debts and not let new ones accrue. This reflects the situation surrounding Covid. Likely in 2020 management felt the firm was not in a good enough financial position, which resulted in a much heavier reliance on short-term debts than taking out new long-term obligations. Then once the firm was able to better its position and saw a recovery on the horizon in 2021, it dedicated more of its assets to pay off the maturities of long-term obligations that they may have deferred the previous year.

Balance Sheets

Pepsi-Co

Trend Analysis

Consolidated Balance Sheet						
PepsiCo, Inc. and Subsidiaries						
December 25, 2021 and December 26, 2020 (in millions except per share amounts)						
	2021	2020	Trend Analysis (\$ value)	Trend Analysis (% change)	Vertical Analysis 2021	Vertical Analysis 2020
ASSETS						
Current Assets						
Cash and cash equivalents	\$ 5 596	\$ 8 185	\$(2 589,00)	-31,63%	6,06%	8,81%
Short-term investments	392	1 366	\$(974,00)	-71,30%	0,42%	1,47%
Accounts and notes receivable, net	8 680	8 404	\$276,00	3,28%	9,40%	9,04%
Inventories	4 347	4 172	\$175,00	4,19%	4,71%	4,49%
Prepaid expenses and other current assets	980	874	\$106,00	12,13%	1,06%	0,94%
Assets held for sale	1 788	0	\$1 788,00	0,00%	1,94%	0,00%
Total Current Assets	21 783	23 001	\$(1 218,00)	-5,30%	23,58%	24,75%
Property, Plant and Equipment, net	22 407	21 369	\$1 038,00	4,86%	24,26%	23,00%
Amortizable Intangible Assets, net	1 538	1 703	\$(165,00)	-9,69%	1,66%	1,83%
Goodwill	18 381	18 757	\$(376,00)	-2,00%	19,90%	20,19%
Other Indefinite-Lived Intangible Assets	17 127	17 612	\$(485,00)	-2,75%	18,54%	18,95%
Investments in Noncontrolled Affiliates	2 627	2 792	\$(165,00)	-5,91%	2,84%	3,00%
Deferred Income Taxes	4 310	4 372	\$(62,00)	-1,42%	4,67%	4,71%
Other Assets	4 204	3 312	\$892,00	26,93%	4,55%	3,56%
Total Non-Current Assets	70 594	66 605	\$3 989,00	5,99%	76,42%	71,68%
Total Assets	\$ 92 377	\$ 92 918	\$(541,00)	-0,58%	100,00%	100,00%
LIABILITIES AND EQUITY						
Current Liabilities						
Short-term debt obligations	\$ 4 308	\$ 3 780	\$528,00	13,97%	4,66%	4,07%
Accounts payable and other current liabilities	21 159	19 592	\$1 567,00	8,00%	22,91%	21,09%
Liabilities held for sale	753	0	\$753,00	0,00%	0,82%	0,00%
Total Current Liabilities	26 220	23 372	\$2 848,00	12,19%	28,38%	25,15%
Long-Term Debt Obligations	36 026	40 370	\$(4 344,00)	-10,76%	39,00%	43,45%
Deferred Income Taxes	4 826	4 284	\$542,00	12,65%	5,22%	4,61%
Other Liabilities	9 154	11 340	\$(2 186,00)	-19,28%	9,91%	12,20%
Total Liabilities	76 226	79 366	\$(3 140,00)	-3,96%	82,52%	85,42%
Commitments and contingencies						
PepsiCo Common Shareholders' Equity						
Common stock	23	23	\$-	0,00%	0,02%	0,02%
Capital in excess of par value	4 001	3 910	\$91,00	2,33%	4,33%	4,21%
Retained earnings	65 165	63 443	\$1 722,00	2,71%	70,54%	68,28%
Accumulated other comprehensive loss	-14 898	-15 476	\$578,00	-3,73%	-16,13%	-16,66%
Repurchased common stock, in excess of par value (484 and 487 shares, respectively)	-38 248	-38 446	\$198,00	-0,52%	-41,40%	-41,38%
Total PepsiCo Common Shareholders' Equity	16 043	13 454	\$2 589,00	19,24%	17,37%	14,48%
Noncontrolling interests	108	98	\$10,00	10,20%	0,12%	0,11%
Total Equity	16 151	13 552	\$2 599,00	19,18%	17,48%	14,58%
Total Liabilities and Equity	\$ 92 377	\$ 92 918	\$(541,00)	-0,58%	100,00%	100,00%

Pepsi-Co performed pretty well between 2020-2021. Their operating profit increased 10%, even though the cost of goods sold, net interest expenses and other expenses drastically increased. Yet, Pepsi-Co has been having a lot of changes and they reflect on their ratios. Even though Pepsi-Co managed to survive Covid-19 through several operations, the crisis pushed the company to look for more shareholders. The Company also announced a new share repurchase program providing for the repurchase of up to \$10 billion of PepsiCo common stock through February 28, 2026.

In the U.S., PepsiCo acts as the exclusive distributor for the new joint venture's portfolio of brands for small-format and foodservice customers with chilled direct-store-delivery. Also their expansion into more than just the beverage industry gave them more global power over the overall Snack industry.



Vertical Analysis

We can observe a huge increase of 1,94% in assets held for sale. This is due to a recent transaction made by the company. On March 23, 2020, Pepsi-Co acquired all of the outstanding shares of Pioneer Foods, a food and beverage company in South Africa with exports to countries across the globe - they refer to it as the juice Transaction in the Balance Sheet.

Income Statements

Coca-Cola

Trend Analysis

CONSOLIDATED STATEMENTS OF INCOME - USD (\$) shares in Millions, \$ in Millions	Dec. 31, 2021	Dec. 31, 2020	Trend Analysis		Verticle	
			amount	% change	Analysis 2021	Analysis 2020
Net Operating Revenues	\$ 38 655	\$ 33 014	5641,00	17,09%	100,00%	100,00%
Cost of goods sold	15 357	13 433	1924,00	14,32%	39,73%	40,69%
Gross Profit	23 298	19 581	3717,00	18,98%	60,27%	59,31%
Selling, general and administrative expenses	12 144	9 731	2413,00	24,80%	31,42%	29,48%
Other operating charges	846	853	-7,00	-0,82%	2,19%	2,58%
Operating Income (EBIT)	10 308	8 997	1311,00	14,57%	26,67%	27,25%
Interest income	276	370	-94,00	-25,41%	0,71%	1,12%
Interest expense	1 597	1 437	160,00	11,13%	4,13%	4,35%
Equity income (loss) — net	1 438	978	460,00	47,03%	3,72%	2,96%
Other income (loss) — net	2 000	841	1159,00	137,81%	5,17%	2,55%
Income Before Income Taxes	12 425	9 749	2676,00	27,45%	32,14%	29,53%
Income taxes	2 621	1 981	640,00	32,31%	6,78%	6,00%
Consolidated Net Income	9 804	7 768	2036,00	26,21%	25,36%	23,53%
Less: Net income (loss) attributable to noncontrolling interests	33	21	12,00	57,14%	0,09%	0,06%
Net Income Attributable to Shareowners of The Coca-Cola Company	\$ 9 771	\$ 7 747	2024,00	26,13%	25,28%	23,47%
Basic Net Income Per Share1	\$ 2,26	\$ 1,80	0,46	25,56%	0,01%	0,01%
Diluted Net Income Per Share1	\$ 2,25	\$ 1,79	0,46	25,70%	0,01%	0,01%
Average Shares Outstanding — Basic	4 315	4 295	20,00	0,47%	11,16%	13,01%
Effect of dilutive securities	25	28	-3,00	-10,71%	0,06%	0,08%
Average Shares Outstanding — Diluted	4 340	4 323	17,00	0,39%	11,23%	13,09%

Biggest value changes:

Net operating revenues (\$5641)

Gross profit (\$3717)

Income before taxes (\$2676)

Biggest percent changes:

Other income (loss) – net (137.81)

Equity income(loss) – net (47.03)

Income taxes (32.31)

Interest income (-25.41)

Selling, general and administrative expenses(24.8)

The biggest value change in Coca-Cola's income statements are in their revenues, due to Covid-19 the revenues in 2020 were extremely low. It stands to reason that as the world returns to normal and consumers resume their regular purchases.

The biggest percent changes are majority losses from incomes unrelated to the operating activities at Coca-Cola. These losses are a result of the investing activities of The Coca-Cola Company.



Vertical Analysis

The changes in the income statement by the percentage of their gross profit were fairly minimal. The largest difference in where their income came from between 2020 and 2021 was the line “other income (loss) - net”.

The percentage of Net Income of The Coca-Cola Company gained in relation to their gross profit was 1.8% lower in 2021 than in the previous year. This change indicates that the firm was spending more on interest expenses and taxes.

Income Statements

Pepsi-Co

Trend Analysis

Pepsico Income Statement	2021	2020	Trend Analysis amount	Trend Analysis (% change)	Vertical Analysis 2021	Vertical Analysis 2020
Net Revenue	\$ 79 474	\$ 70 372	\$ 9 102	12,93%	100,00%	100,00%
Cost of sales	37 075	31 797	\$ 5 278	16,60%	46,65%	45,18%
Gross profit	42 399	38 575	\$ 3 824	9,91%	53,35%	54,82%
Selling, general and administrative expenses	31 237	28 495	\$ 2 742	9,62%	39,30%	40,49%
Operating Profit (EBIT)	11 162	10 080	\$ 1 082	10,73%	14,04%	14,32%
Other pension and retiree medical benefits income/(expense)	522	117	\$ 405	346,15%	0,66%	0,17%
Net interest expense and other	1 863	1 128	\$ 735	65,16%	2,34%	1,60%
Income before income taxes	9 821	9 069	\$ 752	8,29%	12,36%	12,89%
Provision for income taxes	2 142	1 894	\$ 248	13,09%	2,70%	2,69%
Net income	7 679	7 175	\$ 504	7,02%	9,66%	10,20%
Less: Net income attributable to noncontrolling interests	61	55	\$ 6	10,91%	0,08%	0,08%
Net Income Attributable to PepsiCo	\$ 7 618	\$ 7 120	\$ 498	6,99%	9,59%	10,12%

Biggest value changes:

Net operating revenues (\$9102)

Gross profit (\$3824)

Operating Profit (\$1082)

Biggest percent changes:

Other pension and retiree (346%)

Net Interest expense and other (65%)

Cost of sales (16%)

The biggest value change in Pepsi-Co's income statements are in their revenues, the company managed to keep up with their operating activities, even during Covid times.

The biggest percent changes are majority gains from pension and retiree medical benefits.



Vertical Analysis

The largest change for Pepsi-Co would be their net operating revenues which increased by 12%. This can be explained through Pepsi-Co various alternative operations outside the Soda industry during Covid-19. Another important fact is the difference between Pepsi-Co and Coca-Cola's Cost of goods sold and operating expenses. There is a 10% difference between the two in 2020 and 2021. We can also see this as a lower gross profit margin for Pepsi-Co compared to Coca-Cola.

Ratio Analysis



Liquidity

Liquidity ratios measure a firm's short-term liquidity; its ability to meet its short-term obligations come due and meet unexpected needs for cash.

Fig. 5

Coca-Cola Liquidity Ratios

Liquidity Ratios		
	2021	2020
Current Ratio	1,13	1,32
Acid Test Ratio	0,96	0,78

Fig. 6

Pepsi-Co Liquidity Ratios

Liquidity Ratios		
	2021	2020
Current Ratio	0,93	0,98
Acid Test Ratio	0,66	0,81

Current Ratio

The Current Ratio measures how well a firm can meet its short-term obligations come due.

$$\text{Formula: } \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Coca-Cola

2021 : 1.13

2020 : 1.32

The Coca-Cola Company's quick ratio is >1 which is a positive sign for the company as it indicates their ability to pay of any short term obligations come due. During the two year period Coca-Cola improved its position in terms of current ratio by leaving less money sleeping. While their 2020 ratio is a bit high, it is understandable due to the context of the 2020 market crash, being a bad year to make investments regardless of how much extra capital the firm held.

Pepsi-Co

2021 : 0.93

2020 : 0.81

Pepsi-Co's current ratio is below 1 which means that the company's debts due in a year or less are greater than its current assets. This is a negative sign for the company and indicates that they are in the danger zone to not meet short-term financial obligations. Pepsi-Co needs to grow their current assets and or

Acid Test Ratio

The Acid Test or “Quick” ratio measures a firm’s ability to pay off short-term obligations without relying on the sale of inventories. This ratio is the more conservative liquidity ratio as it only includes the most liquid current assets: cash or other current assets that can be easily transformed into cash.

Formula:
$$\frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$$

Coca-Cola

2021 : 0.96

2020 : 0.78

Over this two year period, The Coca-Cola Company grew their current assets beyond inventory and expanded their ability to pay off current liabilities. In 2021 The Coca-Cola Company was keeping a lot of their current assets in cash and cash equivalents, which is reflected in the quick ratio. This is a positive sign and it is particularly important because their current liabilities increased 37% over the past 2 years.

Pepsi-Co

2021 : 0.66

2020 : 0.81

Their current assets decreased of 10% over the year while their current liabilities decreased of 15%. The inventory stayed the same. This creates a gap between the two years and restricted their ability to pay off their current liabilities. Interestingly for the year end of 2020 Pepsi-Co had recorded zero inventories, which likely impacted the 2021 quick ratio, explaining how it is so low. Pepsi-Co was forced into an uncomfortable financial position because they had to buy back their inventory on top of the money lost due to lack of sales in 2020.

Asset Management

Asset Management Ratios measure how effectively a firm manages its assets in order to generate sales. They can evaluate how efficiently key balance sheet assets and liabilities are managed [inventories, receivables, & total assets].

The way a company manages these accounts can have a direct and immediate impact on the firms cash position.

Fig. 7

Asset Management Ratios		
	2021	2020
Inventory Turnover	4,50	0,92
Days Sales Outstanding	33,16	34,76
Total Asset Turnover	0,41	0,38

Fig. 8

Asset Management Ratios		
	2021	2020
Inventory Turnover	8,53	7,62
Days Sales Outstanding	39,86	43,59
Total Asset Turnover	0,34	0,31

Inventory Turnover Ratio

Evaluating inventories - inventory turnover measures a firm's efficiency in turning inventory into sales. Gross profit is earned each time inventory is turned over.

Formula:
$$\frac{\text{Cost of Goods Sold}}{(\text{Average}) \text{ Inventory}}$$

Coca-Cola

2021 : 4.50

2020 : 4.16

The Coca-Cola Company's inventory turnover ratio over the two year period is quite low especially for 2020 (an all time low for Coca-Cola), however they were able to improve this ratio over the period. This may reflect a difficulty in selling products, which may be due to the pandemic. However, Coca-Cola should be reducing inventories so that they can improve this ratio. Compared to Pepsi-Co, Coca-Cola is turning over much less than their competition.

Pepsi-Co

2021 : 8.53

2020 : 7.62

Due to inventory build up, Pepsico's inventory turnover ratio increased to 8.59 in 2021 above company average. This is due to an increase in the cost of goods sold during the year.

Days Sales Outstanding [DSO]

Evaluating Account Receivables - Sometimes called “average collection period”, DSO measures how well a firm manages its accounts receivable. It represents the average number of days between a company making a sale and collecting payment from the customer.

Formula:
$$\frac{\text{Account Recievables}}{\text{Average sales per day}}$$

Coca-Cola

2021 : 33.16

2020 : 34.76

The days sales outstanding for Coca-Cola is a bit over one month, improving very marginally over the two year period. Compared to Pepsi-Co, their average collection period is around ten days shorter. As a B2C firm, the customers are given a bit longer to make payments because they are not the final consumer themselves and need the lead time to sell off their stock.

Pepsi-Co

2021 : 39.86

2020 : 43.59

The days sales outstanding for Pepsi-Co has been lower over the year, notably because of an increase in account receivables and average sales per day. As well as Coca-cola, Pepsi-Co is a B2C firm, the customers are given a bit longer to make payments because they are not the final consumer themselves and need the lead time to sell off their stock.

Total Asset turnover

Evaluating Total Assets - Asset turnover measures how efficiently a firm is using its total assets to generate sales. Asset turnover can indicate whether the company has invested the right amount of total assets relative to its sales.

Formula:
$$\frac{\text{Sales}}{\text{Average Total Assets}}$$

Coca-Cola

2021 : 0.41

2020 : 0.38

The Coca-Cola Company's total asset turnover is very low. However compared to Pepsi-Co during this two year period they were better at managing their total assets. The ratio grew between 2020 and 2021 which is also a positive sign. One way to improve this ratio is by selling assets this is consistent with Coca-Cola's balance sheets where they reported a decrease in plant, property, and equipment, overall as revenues increase after the Covid related market slump Coca-Cola is on the right track to continue improving its total asset turnover.

Pepsi-Co

2021 : 0.34

2020 : 0.31

Pepsi-Co's Total asset turnover stayed pretty stable over the year. But the company has had issues managing their total assets.

Capital Structure Ratios

Capital structure ratios also referred to as Debt Management Ratios measure the extent to which a company uses debt financing. They provide insight into a company's financial health and risk profile. For investors, these ratios can help determine the level of risk associated with investing in a company and the potential returns on their investment. For creditors, these ratios can help determine the creditworthiness of a company and the likelihood of timely repayment of loans. For analysts, these ratios can help forecast a company's future performance

Fig. 9

Capital Structure Ratios		
	2021	2020
Debt Ratio	0,62	0,63
Financial Leverage	2,34	2,57
Times Interest Earned	6,45	6,26

Fig. 10

Capital Structure Ratios		
	2021	2020
Debt Ratio	0,44	0,48
Financial Leverage	2,50	3,26
Times Interest Earned	5,99	8,94

Debt Ratio

The debt ratio measures how much of the companies assets are financed by borrowing.

Formula:
$$\frac{\text{Total Debt}}{\text{Total Assets}}$$

Coca-Cola

2021 : 0.62

2020 : 0.63

Over the two year period Coca-Cola's debt ratio remained nearly the same. Compared to Pepsi-Co this ratio is higher, implying that more of the companies assets are financed through borrowing.

Pepsi-Co

2021 : 0.44

2020 : 0.48

Pepsi-Co stayed steady in their debts and managed to keep a high amount of assets. This can be explained with Covid-19 which reduced a lot of operations. Therefore Pepsi-Co had a lot of assets untouched.

Financial Leverage

Sometimes referred to as the debt to equity ratio, this ratio indicates the proportion of debt and equity used to finance the business entities assets.

Formula:
$$\frac{\text{Total Debt}}{\text{Total Equity}}$$

Coca-Cola

2021 : 2.34

2020 : 2.57

Coca-Cola's financial leverage ratio is very high. This means that the company could be considered as risky to investors because it relies a lot on borrowed money, however for the same reasons the shareholders stand to make higher returns.

Pepsi-Co

2021 : 2.50

2020 : 3.26

Pepsi-Co's financial leverage used to be very high yet the company managed to reduce their debts out of 10% over the year. As well as Coca-cola, Pepsi-Co could be considered as risky to investors but the shareholders are pretty much backing up Pepsi-Co.

Times-Interest-Earned [TIE]

T.I.E. measures a firm's ability to make interest payments on outstanding debt on a pre-tax basis. It is a great tool for assessing a company's long-term solvency by examining its ability to cover interest expense on debt, typically long-term debt.

Formula:
$$\frac{\text{EBIT}}{\text{Interest Expense}}$$

Coca-Cola

2021 : 6.45

2020 : 6.26

Over the two year period Coca-Cola has had a stable times interest earned ratio. The ratio is a bit higher than would be ideal which indicates that they should be using more income to re-invest back into business development

Pepsi-Co

2021 : 5.99

2020 : 8.94

Compared to Coca-Cola, Pepsi-co has been having a big drop in their TIE. This resulted from an increase in Interest Expense over the year. This is a good sign for Pepsi-Co, they are now able to make interest payments on outstanding debt on a pre-tax basis.

Profitability

Profitability Ratios are used to evaluate the ability of a company to generate profits. These ratios measure the efficiency and effectiveness of a company's operations, and provide insight into its ability to generate returns for its shareholders.

Fig. 11

	Profitability Ratios			
	2021		2020	
Gross Profit Margin	0,60	60%	0,59	59%
Net Profit Margin	0,25	25%	0,24	24%
Basic Earning Power	0,11	11%	0,10	10%
Return on Total Assets	0,10	10%	0,09	9%
Return on Equity	0,39	39%	0,36	36%

Fig. 12

	Profitability Ratios			
	2021		2020	
Gross Profit Margin	0,53	53%	0,55	55%
Net Profit Margin	0,25	25%	0,23	23%
Basic Earning Power	0,12	12%	0,08	8%
Return on Total Assets	0,24	24%	0,08	8%
Return on Equity	0,48	48%	0,19	19%

Gross Profit Margin

Gross Profit Margin measures the gross profit per dollar of sales, it shows the firms ability to convert sales into gross profits and generate an operating income.

Formula:
$$\frac{\text{Gross Profit}}{\text{Sales}}$$

Coca-Cola

2021 : 60%

2020 : 59%

Coca-Colas gross profit margin is healthy and improved by 1% over the two year period. Compared to Pepsi-Co, they have higher gross margins.

Pepsi-Co

2021 : 53%

2020 : 55%

Pepsi-Co's gross profit margin has decreased over the year but is still pretty good regarding their various operations. They have the ability for 1\$ of sales to convert it into 0.53\$.

Net Profit Margin

The Net Profit Margin measures the net profit per dollar of sales. This ratio shows a company's ability to convert sales into shareholder profits.

Formula:
$$\frac{\text{Net Profit}}{\text{Sales}}$$

Coca-Cola

2021 : 25%

2020 : 24%

Coca-Cola overall has very high net margins, over the two year period they were able to raise this margin by 1%. Compared to Pepsi-Co, they have very similar net margins, which indicates that they spend more on operating costs given that they started with higher gross margins. However, it is important to consider that Coca-Cola rely's more on borrowing to finance their company assets which increases the interest expenses they must pay.

Pepsi-Co

2021 : 25%

2020 : 23%

Pepsi-Co has a high Net Profit Margin like its competitor Coca-Cola. Net profit margin helps investors assess if a company's management is generating enough profit from its sales and whether operating costs and overhead costs are under control. Therefore this is a good sign for Pepsi-Co's inverstors.

Basic Earning Power [BEP]

BEP measures the raw earning power of the firm's assets, before the influence of taxes and leverage. It is useful when comparing companies with different capital structures and tax situations.

Formula:
$$\frac{\text{EBIT}}{\text{Total Assets}}$$

Coca-Cola

2021 : 11%

2020 : 10%

Coca-Cola's basic earning power increased 1% over the two year period, this figure is rather healthy. Although it did not increase as much as Peps-Co during the two year period, they were able to maintain a regular B.E.P. ratio through the instability of 2020.

Pepsi-Co

2021 : 12%

2020 : 8%

Pepsi-Co's BEP has been improving notably thanks to an increase in their EBIT. This result is not very surprising regarding the Covid crisis which made Pepsi-Co keep their assets steady over the year.

Return on Total Assets

A ratio to measure return on total assets (ROA) after interest and taxes. ROA shows how efficiently the management use company assets to generate profit.

Formula:
$$\frac{\text{Net Income}}{\text{Total Assets}}$$

Coca-Cola

2021 : 10%

2020 : 9%

The return ratio on total assets for Coca-Cola in the two year period is fairly low, indicating the companies difficulties with managing their assets. Their asset and inventory turnover ratios have been bellow the industry average in this accounting period. However The Coca-Cola Company is on the right path to continue a steady growth of return on assets as they improve sales in a post-covid world without a huge growth in assets.

Pepsi-Co

2021 : 24%

2020 : 8%

The return on total assets for Pepsi-co increased significantly in a year which can be explained by an increase in the net income justified by a large increase in revenue and stable taxes. Pepsi-Co is on the path to continue a steady growth yet their Costs of goods sold is also increasing - They would need to pay close attention to it.

Return on Equity

Return on Equity measures the net income as a percentage of stockholders' investment. It shows how efficiently the managements is generating returns for the shareholders' investement.

Formula:
$$\frac{\text{Net Income}}{\text{Owners' Equity}}$$

Coca-Cola

2021 : 39%

2020 : 36%

The ROE has grown over the two year period. It is in a healthy state and stable, making Coca-Cola a good investment to keep, however there is not the largest potential for further growth beyond recovery to pre-covid levels.

Pepsi-Co

2021 : 48%

2020 : 19%

Pepsi-Co experienced a significant growth in terms of revenues which led to a bigger ratio of return on equity. Pepsi-Co managed to survive Covid-19 through their various operations such as in the food industry.

The DUPONT Equation

[ROE]

Decoding DuPont analysis provides us a deeper understanding of a company by examining the driving force behind the return on equity. The Dupont equation breaks down the ROE into three components: the net profit margin, the total asset turnover, and the equity multiplier. These components tell us the firms operating efficiency, asset use efficiency, and financial efficiency.

The Dupont equation is expressed as:

$$\text{ROE} = (\text{Net Profit Margin}) * (\text{Total Asset Turnover}) * (\text{Equity Multiplier})$$

Coca-Cola

2021

$$0.39 = 0.25 * 0.41 * 3.80$$

2020

$$0.36 = 0.24 * 0.38 * 4.10$$

Pepsi-Co

2021

$$0.48 = 0.25 * 0.34 * 5.72$$

2020

$$0.19 = 0.23 * 0.31 * 6.86$$



In Conclusion...

The story that the financials of Pepsi-co and Coca-Cola over the two year period tells is that of the tortoise and the hare. Coca-Cola was more stable overall, with less change in their ratio values and balance sheet items. Whereas Pepsi had concerningly low numbers and ratios for 2020 but they were able to bounce back faster. By the end of 2021 Pepsi-Co's ratios have change imensley and seem healthier, in isolation, that those of the Coca-Cola industry. It is important to remeber that Pepsi-co has a much wider diversity of product in their portfolio, so it stands to reason they have the ability to bounce back stronger and faster. Coca-Cola on the other hand had a much more conservative approach to financial management in the two year period, focused less on growth and quickly re-building ratios so that they could focus on reducing long-term debts.

As for Pepsi-Co, the company has navigated the health crisis better than Coca-Cola as it relies more on grocery and retail channels from where consumers stockpiled snacks and beverages.

