Pfizer Financial Performance Analysis Report 2019-2022

Yinglin Wei

Faculaty of Science, The University of Sydney, Sydney, 2008, Australia

Abstract. The analysis report aims to evaluate Pfizer financial performance in the last three years to provide a comprehensive analysis for stakeholders. Pfizer is a leading global biopharmaceutical giant with operations across the world. Pfizer put Research and Development at the core of business development, and owns range of exclusive patents in some key diseases area. In 2022, Pfizer generated 95% increase in revenue due to the excess demand of Comirnaty and other product categories. The skyrocketing revenue brings positive surplus to the cashflow, profitability and return ratios. In addition, business operations have improved in relation to inventory managements and turnover ratios, which are driven by corporate strategy and increasing demands. However, stepping into post pandemic times, the key business challenge for Pfizer is how to maintain growth in product sales since some of the key patent protection would be expired in the near future and the health sector is becoming more intensive and competitive.

Keywords: Income Statement; Balance Sheet; Cashflow; Capital Structure; Return Ratios.

1. Introduction

Pfizer Inc. is an international biopharmaceutical company found in 1849 in New York. The mission of Pfizer is to apply science and their global resources to bring therapies to people that extend and significantly improve their lives through the discovery, development, manufacture, marketing, sale and distribution of biopharmaceutical products worldwide. The company operates in developed and emerging markets to provide wellness, prevention, treatments and cures that challenge the most feared diseases of our time. By collaborating with healthcare providers, governments and local communities, Pfizer provides and expand access to reliable, affordable healthcare around the world.

The business purpose of Pfizer is to breakthroughs that change patients' lives. Pfizer's growth strategy is driven by five "Bold Moves" that help to deliver breakthroughs for patients and create value for shareholders and other stakeholders:

- 1. Unleash the power of our people;
- 2. Deliver first-in-class science;
- 3. Transform our go-to-market model;
- 4. Win the digital race in pharma; and
- 5. Lead the conversation.

Table 1. Pfizer business areas

Therapeutic Area	Description	Key Products
Vaccines	Includes innovative vaccines across all ages—infants, adolescents and adults—in pneumococcal disease, meningococcal disease, tick- borne encephalitis and COVID-19, with a pipeline focus on infectious diseases with significant unmet medical need.	Comirnaty/BNT162b2*, the Prevnar family*, Nimenrix, FSME/IMMUN- TicoVac and Trumenba
Oncology	Includes innovative oncology brands of biologics, small molecules, immunotherapies and biosimilars across a wide range of cancers.	Ibrance*, Xtandi*, Inlyta*, Sutent, Retacrit, Lorbrena and Braftovi
Internal Medicine	Includes innovative brands in cardiovascular metabolic and women's health, as well as regional brands.	Eliquis* and the Premarin family
Hospital**	Includes our global portfolio of sterile injectable and anti-infective medicines, as well as an oral COVID-19 treatment.	Sulperazon, Medrol, Zavicefta, Zithromax, Vfend, Panzyga and Paxlovid
Inflammation & Immunology	Includes innovative brands and biosimilars for chronic immune and inflammatory diseases.	Xeljanz*, Enbrel (outside the U.S. and Canada)*, Inflectra, Eucrisa/Staquis and Cibinqo
Rare Disease	Includes innovative brands for a number of therapeutic areas with rare diseases, including amyloidosis, hemophilia and endocrine diseases.	Vyndaqel/Vyndamax*, BeneFIX and Genotropin

Source: Pfizer 2021 annual report

In addition, Pfizer continues to enhance its ESG strategy, which is focused on six areas where we see opportunities to create a meaningful impact over the next decade: product innovation; equitable access and pricing; product quality and safety; diversity, equity and inclusion; climate change; and business ethics.

The main operating areas and product categories are listed in Table 1.

2. Balance Sheet Analysis

2.1 Asset Quality Analysis

The asset quality reflects the quantity of existing and potential credit risk associated with a firm's current investment portfolio. Good asset quality rating leads to higher credit rating, which can strengthen an organization's position in the market (B, 2023)

Table 2. Asset quality analysis

(In Millions)	2019	2020	2021
Assets			
Cash and cash equivalents	3.98%	3.26%	5.09%
Short term investments	25.99%	48.79%	29.76%
Trade accounts receivable, less allowance for doubtful accounts	26.60%	19.23%	22.57%
Inventories	25.25%	15.24%	22.87%
Current tax assets	10.19%	7.15%	9.31%
Other current assets	7.93%	6.40%	10.40%
Total current assets	19.59%	32.89%	22.74%
Equity-method investment	12.72%	13.53%	14.15%
Long term investments	2.24%	4.15%	2.86%
Property, plan and equipment	10.37%	12.22%	11.53%
Identifiable intangible assets	26.26%	20.65%	23.78%
Goodwill	43.55%	40.41%	41.59%
Noncurrent deferred tax assets and other noncurrent tax assets	1.56%	2.74%	2.00%
Other noncurrent assets	3.30%	6.31%	4.09%
Total noncurrent assets	80.41%	<mark>67.11%</mark>	<mark>77.26%</mark>
Total assets	100.00%	100.00%	100.00%

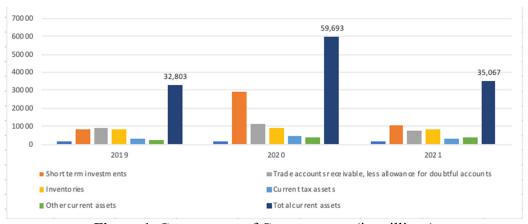


Figure 1. Components of Current assets (in millions)

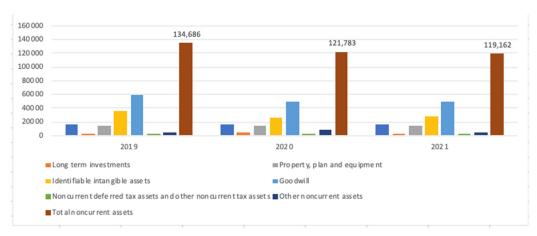


Figure 2. Components of Noncurrent assets (in millions)

There are no noticeable changes of the percentage between current and non-current assets. Current assets ratio has slightly increase in recent years. Short term investment, trade accounts receivable and inventories are the major components of current assets. Despite the sudden increase in 2020, the short term investment level has returned to 2019 level, which is about 30% of the current assets. Trade receivables and inventories are gradually increasing with 23% of total current assets respectively. The noncurrent assets accounts of 77% of total assets. The biggest component is goodwill, accounting over 40% of the total noncurrent assets, followed by intangible assets (23.78%) and equity investment (14.15%).

2.2 Capital Structure Analysis

Capital structure refers to the combination of debt and equity of a company. However, there is no perfect level for the percentage. A company with excess debt can be considered as credit risk. On the other hand, too much equity suggests the company is underutilizing its growth opportunities or paying too much for dividends (Tuovila, 2023)

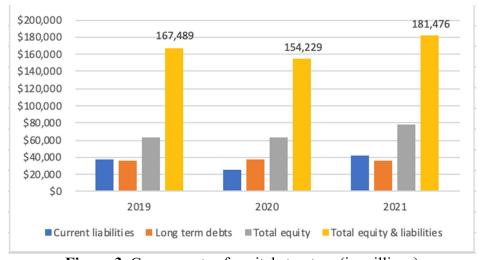


Figure 3. Components of capital structure (in millions)

According to the common-size financial statement of liabilities, the total liabilities have gradually decreased from 62% to 57%, mainly driven by lower level of long-term debts and other noncurrent liabilities. However, the increase is partly offset by the increased in current liabilities from 17% to 24%. The total liabilities level is decreasing.

The equity level is relatively flat without significant fluctuations.

Table 3. Common-Size Consolidated Statement of Financial Position, Liabilities and Stockholders'

	Equity		
	2019	2020	2021
Short term borrowings	43.41%	10.43%	5.25%
Trade accounts payable	11.31%	16.52%	13.07%
Dividends payable	5.64%	8.34%	5.27%
Income taxes payable	2.63%	4.05%	2.97%
Other current liabilities	37.01%	60.66%	73.44%
Current liabilities	22.27%	16.81%	23.51%
Long term debts	21.47%	24.08%	19.94%
Other noncurrent liabilities	18.38%	17.96%	13.86%
Total liabilities	62.12%	58.84%	57.32%
Preferred stock			
Common stock			
Additional paid in capital			
Retained earnings			
Pfizer shareholder equity			
Noncontrolling interests			
Total equity	37.88%	41.16%	42.68%
Total equity & liabilities	100%	100%	100%

3. Income Statement Analysis

The Income Statement is one of a company's core financial statements that shows their profit and loss over a period of time (Jeff, 2023).

Table 4. Consolidated income statement

	2019	2020	2021
Revenue	40,905	41,651	81,288
Cost of goods sold	8,054	8,484	30,821
Gross Profit	32,851	33,167	50,467
Research and development expenses	8,385	8,709	10,360
Other operating income or expenses	12,726	11,597	12,703
Operating expenses	26,141	24,917	31,034
Operating income	6,710	8,250	19,433
Total Non-operating income/expense	4,610	1,213	4,878
Pre tax Income	11,312	7,036	24,311
Income taxes	583	370	1,852
Income after taxes	10,738	6,666	22,459
Income from discontinued operations	5,318	2,529	(434)
Net income	16,026	9,159	21,979

Table 5. Consolidated income statement in percentage

	2019	2020	2021
Revenue	100.00%	100.00%	100.00%
Cost of goods sold	19.69%	20.37%	37.92%
Gross Profit	80.31%	79.63%	62.08%
Research and development expenses			
Other operating income or expenses			
Operating expenses			
Operating income			
Total Non-operating income/expense			
Income before taxes	27.65%	16.89%	29.91%
Income taxes			
Income after taxes			
Income from discontinued operations			
Net income	39.18%	21.99%	27.04%

3.1 Revenue Analysis

The revenue in 2021 has dramatic increase, reaching \$81.3 billion, which is 95% growth compared to previous year. Biopharma accounted nearly 98% of total revenues worldwide. In terms of product categories, growth from Comirnaty, Eliquis, Biosimilars, Vyndaqel/Vyndamax, the Hospital therapeutic area, Inlyta and Xtandi, partially offset by a decline from the Prevnar family, while Xeljanz and Ibrance were stable. The biggest sales increase come from Comirnaty, which has increased from \$154 to \$36,781 in 2021, driven by global uptake, following a growing number of regulatory approvals and temporary authorizations. Other products including Eliquis has 19% increase in sales, Biosimilars (51%), Vyndaqel/Vyndamax (55%), Inlyta (26%) and Xtandi (16%).

In terms of geography, revenues from operations outside the U.S. were \$51.5 billion, accounted for 63% of total revenues in 2021. Revenues exceeded \$500 million in each of 21, 8 and 10 countries outside the U.S. in 2021, 2020 and 2019, respectively, with the increase in the number of countries in 2021 primarily driven by Comirnaty. Japan was our largest national market outside the U.S. in 2021.

3.2 Cost of Goods Sold Analysis

The COGS increased nearly 18%, \$22.3 billion in monetary terms, compared to previous year. The rapid growth in cost is mainly due to the product sales increase. In terms of Comirnaty, which includes a charge for the 50% gross profit split with BioNTech and applicable royalty expenses; In addition, unfavorable impact of foreign exchange and hedging activity on intercompany inventory also result in higher COGS. Under the influence of higher COGS, gross profit margin reduced significantly from 80% in 2019 to 62% in 2021.

3.3 Expense Analysis

In terms of SI&A expenses, there is \$1.1 billion increase (9.5% vs 202) in 2021, mainly driven by increased product-related spending across multiple therapeutic areas; for example, higher SI&A costs related to Comirnaty are driven by a higher provision for healthcare reform fees based on sales.

In terms of R&D expenses, there is \$4.4 billion increase (19% vs 2020) in 2021, majority of the expenses were spent on a charge for acquired IPR&D related to the acquisition of Trillium; a net increase in charges for upfront and milestone payments on collaboration and licensing arrangements, driven by payments to Arvinas and Beam; and increased investments across multiple therapeutic areas, including additional spending related to the development of the oral COVID-19 treatment program.

3.4 Net Income Analysis

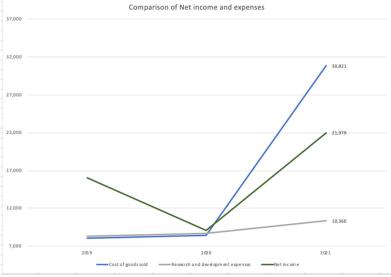


Figure 4. Comparison of Net income and expenses

Net income attributable to Pfizer was \$2.2 billion in 2021, compared to \$0.9 billion in 2020. The increase was primarily driven by the remarkable increase in revenues, partly offset by higher COGS. However, since the other expenses did not have significant increase, the net income level was growing after a deep dive in 2020 and reaching record-high level as shown in the graph.

4. Cash Flow Statement Analysis

Cash flow activities summaries a business's cash inflow and outflow by keeping track of the amount of money that flows in and out as a result of business handling. Having sufficient cash available is important for business operation.

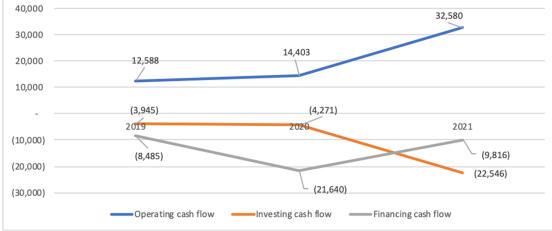


Figure 5. Cashflow activities (millions)

Source: Pfizer annual report 2021

First key part is the operation cash flow which shows cash flow information related to the daily operations of the business such as raw material purchase and revenue generation. By evaluating the operation cash flow, we can understand whether business can generate sufficient cash from its operation activities. Pfizer had 126% increase to 32,580 million in 2021 in terms of the operational cash. The significant increases in cash are mainly due to the rapid increase in revenue, which had 95% growth to reach 81.3 billion in US dollars in 2021. The sales of Comirnaty and Paxlovid are the main contributors and accounted for nearly 92% of the increase in revenue. In addition, favorable foreign exchange and LOE and other operational impacts are the remaining reasons for the notable increase in revenue.

Investing cash flow includes cash flow information related to purchase or sale of long-term investments, such as property, equipment, or acquisition. Pfizer keeps a stable investment level during 2019 and 2020, however, in 2021, the companies rapidly increased 427% in investment level to reach 22,546 million. According to 2021 annual report, the change was driven mainly by a \$24.7 billion increase in purchases of short-term investments with original maturities of greater than three months and a \$9.0 billion increase in net purchases of short-term investments with original maturities of three months or less.

The financing cash flow outlines all cash transactions from long-term liability and stockholder equity accounts, including notes payable, retained earnings and dividend payments. It can be used to analyze how a firm raises capital and pays it back to investors through capital markets. Cash used in financing activities was \$9,816 million in 2021, compared to \$21,640 million in 2020, which is approximately 55% decrease. According to annual report 2021, the change was driven mostly by a \$9.8 billion net reduction in repayments of short-term borrowings with maturities of greater than three months, a \$4.0 billion decrease in net payments on short-term borrowings with maturities of three months or less and a \$2.0 billion reduction in repayments of long-term debt.

Overall, Pfizer generates exceptional increase in cash from operations activities under the COVID-19 influence. By increasing the investing activities and lowering the financing activities at large

extend, it can be inferred that Pfizer management holds optimistic opinions for future development. The net cash income is positive 218 million in 2021.

5. Financial Ratios Analysis

5.1 Profitability Ratios

Financial ratios are useful tools that help stakeholders analyze and compare financial health. By comparing across internal past history, industry and competitors, it can reveal whether the company is performing well (Carlson, 2022).

Table 6. Profitability ratios

	2019	2020	2021
Gross profit margin	80.31%	79.63%	62.08%
Operating profit margin	16.40%	19.81%	23.91%
Net profit margin	39.18%	21.99%	27.04%
Return on R&D expense	17%	86%	87%

Source: https://www.macrotrends.net/stocks/charts/PFE/pfizer/financial-statements

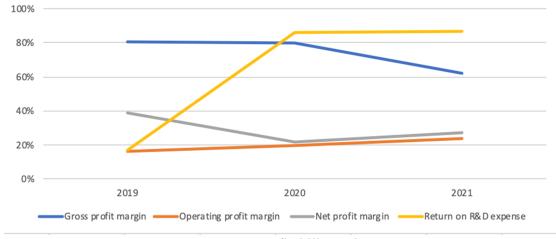


Figure 6. Profitability ratios

The gross profit margin calculates the percentage of total revenue a company has left over above costs directly related to production and distribution. Gross margin can be assessed as how well a company is managing the cost of production. Pfizer has a declining gross margin from 2019 to 2021, from 80% to 62%. According to 2021 annual report, the cost of goods had increased \$22.3 billion in 2021, mainly due to the impact of Comirnaty, which includes a charge for the 50% gross profit split with BioNTech and applicable royalty expenses; increased sales volumes of other products, driven mostly by PC1; and the unfavorable impact of foreign exchange and hedging activity on intercompany inventory.

Operating margin represents the percentage of revenue left after subtracting all the operational expenses, indicating the amount of profit the company has left before taxes and interest. The operation margin is important to investors to evaluate because it indicates how efficiently a company is able to generate profit by expressing it through a per-sale basis. Despite the lower gross profit margin, the operation margin is increasing to 23.91% from 16.40% in 2019, which means Pfizer has improved its operation efficiency despite the higher production costs.

Net profit margin is a measure of net profit to revenue, indicating a business's overall profitability. As a result of decreasing profit margin, the net profit margin is showing a decline from 39% to 27%.

The return on R&D expenses are jumping from 17% in 2019 to over 80% in recent two years. This is mainly due to increased sales on Comirnaty and Paxlovid to offset the previous R&D expenses. As

a leading international pharmaceutical and biotechnology corporation, it is important to have competitive competences in developing innovative drugs and demonstrate strong return on R&D investments. Under the global health challenges, the company should continue to place R&D at core strategy.

5.2 Activity Ratios

The turnover ratios are valuable financial metric that indicates whether a company may suffer cash shortage or bankrupt.

Table 7. Activity ratios

Turnover Ratios	2019	2020	2021
Inventory turnover	1.23	1.08	3.4
Collection turnover	5.93	5.28	7.08
Payable turnover	2.42	2.02	5.53

Average No. of days	2019	2020	2021
Days inventory held		338	107
Add: Average collection period		69	52
Operating cycle		407	159
Less: average payable payment period	151	181	66
Cash conversion cycle	207	226	93

Source: https:// www. stock-analysis-on. net/NYSE/ Company/ Pfizer-Inc/ Ratios/Short-term-Operating-Activity

The inventory turnover ratio tells the inventory efficiency by showing how well the business manages its inventory levels and how frequently they are replenished. Pfizer had higher inventory turnover ratio (3.4) in 2021, which means the company implemented better inventory management and avoid overstocking.

Collection turnover refers to the relationship between net credit sales and average accounts receivable. Higher receivables turnover ratios indicate that a company's collection of accounts receivable is efficient and that it has a high proportion of quality customers who pay their debts on time. Pfizer had an increasing collection turnover ratio from 5.93 in 2019 to 7.08 in 2021.

Payable turnover ratio measures the number of days a business takes to pay its invoices and bills to its suppliers. Pfizer is increasing its payable turnover from 2.42 to 5.53 in 2021, which means it leaves longer period for the company to generate cash to pay its suppliers.

With the less inventory holding period, shorter collection period, and longer payment period, Pfizer successfully shorten the cash conversion cycle from 207 in 2019 to 93 in 2021, which means Pfizer improved its cash flow and guarantee the required cash for daily operation, thus the risk for cash shortage is lower.

5.3 Liquidity Ratios

Liquidity ratios determine how quickly a company can convert its assets and use them for paying short term liabilities. The higher the ratio, the easier is the ability to clear the debts and avoid defaulting on payments.

Table 8. liquidity ratios

	2019	2020	2021
Current ratio	0.88	1.35	1.40
Quick ratio	0.50	0.78	1.00
Cash ratio	0.26	0.47	0.73

Source: https://www.macrotrends.net/stocks/charts/PFE/pfizer/financial-statements

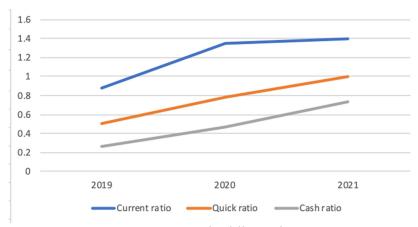


Figure 7. Liquidity ratios

Current ratio, quick ratio and cash ratio are all increasing over the past three years, which means the liquidity of Pfizer is improving.

5.4 Leverage and Coverage Ratios

Asset turnover ratio is the ratio between the value of a company's sales or revenues and the value of its assets. It is an indicator of the efficiency with which a company is deploying its assets to produce the revenue.

Table 9. Long-term (investment) activity ratios

1 4020 > 1 20118 (1111 (1111	0001110110) 00001 100	100	
	2019	2020	2021
Net fixed asset turnover	3.39	2.74	4.59
Total asset turnover	0.31	0.27	0.45
Equity turnover	0.82	0.66	1.05
Debt and solvency ratios			
Debt to equity	0.57	0.59	0.47
Interest coverage	7.67	5.6	16.5

Source: calculate from 2021 annual report

With the increasing asset turnover ratio, Pfizer is improving its assets efficiency. The equity turnover ratio is also increasing to 1.05, which means Pfizer is improving its equity efficiency as well.

The debt to equity indicates the a company's debt as a percentage of its shareholder's equity. Although the ratio slightly decreased in 2021, it is still within control and the chances that Pfizer face financial risks are still low.

Interest coverage indicates how easily a firm can pay its outstanding debt. Pfizer has am increasing interest coverage ratio from 7.67 to 16.5 in 2021, which means the business performance is very stable and its earnings for highly adequate to cover the debts and therefore, less risky for investors.

6. Du-Pont Analysis

Table 10. Return ratios

- *****					
	2019	2020	2021		
ROE	25.86%	14.15%	30.05%		
ROA	9.87%	5.41%	12.75%		

Source: https://www.macrotrends.net/stocks/charts/PFE/pfizer/roe

https://www.macrotrends.net/stocks/charts/PFE/pfizer/roa

Return on equity (ROE) is the measure of a company's net income divided by its shareholders' equity. ROE can be used to helps investors understand whether they're getting a good return on their money, while it's useful in evaluating how efficiently the company utilize its equity.

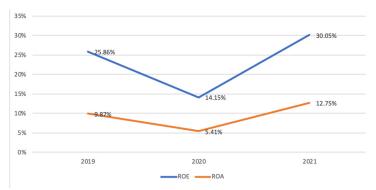


Figure 8. Comparison of ROE and ROA

Although ROE dropped dramatically in previous year, it returned to 30.05%, which is 16% higher than 2019. The remarkable increase in ROE is primarily due to the increase in net income. According to Pfizer 2021 annual report, the net income increased 17.3 billion in 2021 compared to previous year largely because of the growth in revenues. ROA shares similar situation where it is showing strong return to pre-2019 level despite the drop in 2020. However, the figure is showing fluctuations in recent years and should be closely monitored. in general, Pfizer should continue to achieve sales growth in key product categories to maintain a good return ratios for investors.

7. Summary and Outlook

From the above analysis, Pfizer had successfully generated high sales revenue from Comirnaty and therefore, increasing the annual net income level. As a consequence, investors are satisfied to see improved return ratios. In terms of business operation, Pfizer is performing towards favorable directions with stronger cash capabilities and less liabilities. It can be interfered that Pfizer is improving its business operation to achieve higher level of efficiency and hence profitability. However, since pandemic times have past, it is critical for Pfizer to consider how to maintain its competitive advantages in product sales. Research and development is key to success for the leading biopharmaceutical company. It is important that Pfizer can maintain its R&D leading position and successfully develop innovative drugs for patients all over the world.

References

- [1] B, J. (2023, March 1). What is asset quality? Smart Capital Mind. Retrieved March 7, 2023, from https://www.smartcapitalmind.com/what-is-asset-quality.htm.
- [2] Carlson, R. (2022, September 3). What is financial ratio analysis? The Balance. Retrieved March 7, 2023, from https://www.thebalancemoney.com/what-is-financial-ratio-analysis-393186.
- [3] Jeff, J. (2023, March 4). Income statement. Corporate Finance Institute. Retrieved March 7, 2023, from https://corporatefinanceinstitute.com/resources/accounting/income-statement/.
- [4] Tuovila, A. (2023, January 13). Capital structure definition, types, importance, and examples. Investopedia. Retrieved March 7, 2023, from https://www.investopedia.com/terms/c/capitalstructure.asp.
- [5] Pfizer. (2022). Annual reports. Pfizer Inc. Investor Relations Financials Annual Reports. Retrieved March 24, 2023, from https://investors.pfizer.com/Investors/Financials/Annual-Reports/default.aspx.
- [6] CFI. (2023). Return on equity (ROE). Corporate Finance Institute. Retrieved March 24, 2023, from https://corporatefinanceinstitute.com/resources/accounting/what-is-return-on-equity-roe/.