BP AMOCO Financial Performance Analysis: Fiscal Years 2020 to 2023

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Introduction

The following case write-up, as constructed by financial management firm **Money Mavericks**, will analyze the financial performance of BP Amoco, one of the world's leading integrated oil and gas companies. We will start by providing a corporate summary of BP Amoco, followed by a brief overview of its key competitors in the industry. Next, we will delve into the financial statements of BP Amoco, including an overview of its income statement, balance sheet, and cash flow statement. We will then present common size financials to provide a better understanding of the company's financial structure and performance relative to its industry peers. Following this, we will conduct a thorough financial ratio analysis to evaluate BP Amoco's liquidity, profitability, efficiency, and solvency. This analysis will help us identify the company's strengths and weaknesses in terms of financial health and performance. We will also discuss our valuation financial observations and characteristics, examining the market value of BP Amoco's shares and assessing whether the company is overvalued or undervalued based on its financial performance.

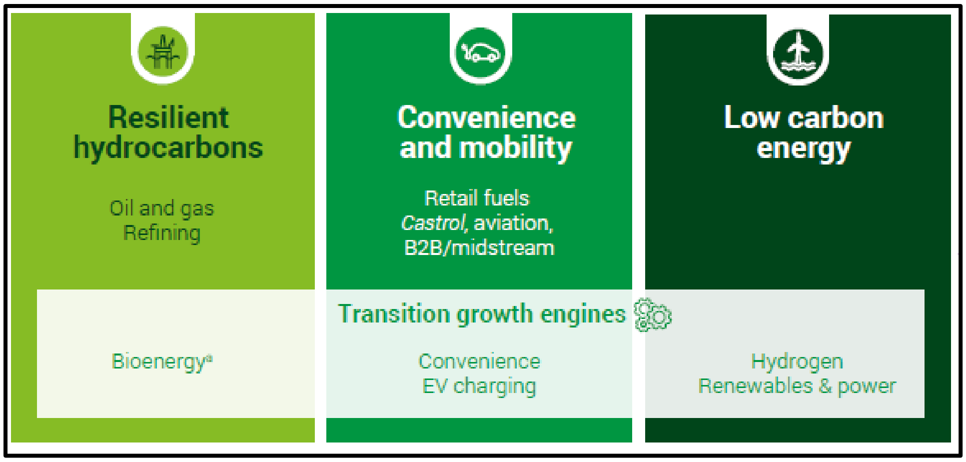
Lastly, the conclusion provides a summary of Money Maverick's findings along with recommendations for potential strategic actions that BP Amoco can take to improve its financial performance and position in the industry. By examining these key areas of the company's financials, we hope to provide BP Amoco with valuable insights into its overall financial health and performance, as well as its competitive position in the market.

Corporate Summary

BP Amoco is one of the world's leading integrated oil and gas companies. It was formed in 1998 through the merger of British Petroleum (BP) and The American Oil Company (Amoco). Today, it is commonly referred to as BP.

BP's website states that their "purpose is reimagining energy for people and our planet. We want to help the world reach net zero and improve people's lives." In 2020, they announced a goal of achieving net zero carbon emissions by 2050, and they launched a new marketing campaign to rebrand themselves from an "oil company" to an "integrated energy company." This initiative marked a significant shift in BP's strategic direction towards a more diverse and sustainable energy portfolio. While they have adjusted the timeline for their net zero goal by allowing for more time to meet this goal, they are still making progress, which is evident in their current strategy.

According to BP's 2023 Annual Report, their current strategy is centered around three primary areas of activity, which incorporate five different growth drivers. The three primary focuses include resilient hydrocarbons, convenience and mobility, and low carbon energy, while the five growth drivers are bioenergy, convenience, EV charging, hydrogen, and renewables and power.



Competitor Brief

ExxonMobil

- Strengths: Diversified operations across segments; $414 billion revenue in 2022
- Weaknesses: Dependence on fossil fuels; Environmental challenges
- Opportunities: Investments in renewables; Industry consolidation
- Threats: Commodity price volatility; Shift to cleaner energy

Royal Dutch Shell

- Strengths: Strong global brand; Cleaner energy investments
- Weaknesses: High debt post-2020; Legal issues (e.g., Nigeria)
- Opportunities: Growing LNG demand; EV charging networks
- Threats: Stricter climate rules; Renewable energy competition

TotalEnergies

- Strengths: Energy transition focus; Solar, wind investments
- Weaknesses: Legacy environmental issues; Balancing portfolio
- Opportunities: African markets; Global renewable partnerships
- Threats: Political instability; Rapid tech changes

Chevron

- Strengths: Strong balance sheet; Key assets in Permian, LNG
- Weaknesses: Slow renewable transition; Legal challenges
- Opportunities: Strategic acquisitions; Carbon capture projects
- Threats: Long-term oil demand decline; Cybersecurity

Saudi Aramco

- Strengths: Largest, low-cost oil producer; High market cap
- Weaknesses: Oil price dependency; Middle East geopolitics

- Opportunities: Downstream expansion; Asian demand growth
- Threats: Global decarbonization; U.S. shale competition

<u>Sinopec</u>

- Strengths: China's top refiner; Growing petrochemicals
- Weaknesses: Exposure to Chinese economy; Limited global presence
- Opportunities: Belt and Road; Domestic EV infrastructure
- Threats: U.S.-China tensions; Domestic competitors

<u>Gazprom</u>

- Strengths: Largest gas reserves; Key European supplier
- Weaknesses: European market reliance; Ukraine sanctions impact
- Opportunities: China pipeline; Global LNG projects
- Threats: EU reducing Russian gas; U.S. LNG competition

<u>ENI</u>

- Strengths: African renewables pioneer; Successful exploration
- Weaknesses: Smaller than majors; Italian political influence
- Opportunities: National oil company partnerships; Hydrogen projects
- Threats: North African Instability; EU gas investment rules

<u>PetroChina</u>

- Strengths: China upstream leader; Benefiting from gas shift
- Weaknesses: State control limits agility; Environmental incidents
- Opportunities: China's gas demand; Belt and Road projects
- Threats: State-owned enterprise scrutiny; China's renewable targets

<u>ConocoPhillips</u>

- Strengths: Low-cost asset focus; ESG leadership in U.S.
- Weaknesses: Less diversified; U.S. shale volatility exposure
- Opportunities: Strategic asset acquisitions; Natural gas carbon capture
- Threats: Climate activism pressure; Potential drilling limits

<u>Competitor Analysis Brief</u>

ExxonMobil is one of BP AMOCO’s largest competitors, with diversified operations within upstream, downstream, and chemical business segments. However, its dependence on fossil fuels and environmental challenges poses risks for the firm as global demand shifts towards cleaner energy sources.

Companies like Royal Dutch Shell, TotalEnergies, Chevron, and ENI are major competitors that have taken the lead in investing and financing renewable energy sources, including solar, wind, thermal, and hydrogen. Strategizing capital discipline for the global energy transition may have future benefits but will still face challenges as oil and gas revenues drive their current business models.

State-owned companies like Saudi Aramco, Sinopec, Gazprom, and PetroChina have a vast share of the market and dominate oil production and refining. With recent geopolitical events and environmental pressure, these corporations are at risk of aligning their business models with national renewable energy targets.

The key competitive factor that offers opportunities for the oil and gas industry is the ability to invest in R&D and technology that can transition current assets to generate cleaner energy while maintaining operational efficiency at a low cost. Strategic acquisitions and investments, such as developing carbon capture systems, will become increasingly important as oil and gas companies face internal transitions in the industry.

Financial Statements Summary

General Corporate Size

In general, larger companies have higher total revenues compared to smaller companies, as they tend to have more extensive operations, a bigger customer base, and greater market reach. Therefore, BP's total revenue of over $210 billion is indicative of a large corporate size. This amount of revenue would suggest that BP has one of the largest corporate sizes, operates on a global scale, and has a substantial presence in the oil and gas industry.

Asset Composition

Asset composition refers to the overall breakdown of a company's assets by highlighting how assets are allocated across different categories. BP's balance sheet showed that BP had $104.1 billion in total current assets, with a notable $176.1 billion in total non-current assets, including $278.6 billion in gross property, plant, & equipment (PPE) and $216.5 billion in properties alone. Having such a significant portion of assets allocated in PPE could indicate that BP has invested heavily in infrastructure to support its operations and that it has focused on long-term investments in the form tangible assets.

Current Assets

The total current assets amount to $104.1 billion. These include cash, cash equivalents, and short-term investments valued at $28.6 billion and an inventory value of $22.8 billion, accounting for nearly 50% of the total current assets. This high proportion indicates a strong level of liquidity for BP and suggests that they have substantial resources to meet their short-term obligations.

The current ratio, which stands at 1.2, signifies that BP has sufficient current assets to cover its current liabilities, as a ratio above 1 indicates. Additionally, the quick ratio of 0.945 reflects excellent short-term liquidity for BP, allowing them to meet short-term obligations.

Overall, BP's assets indicate a strong liquidity position, with a significant portion of their total current assets allocated to cash, cash equivalents, short-term investments, and inventory. This allocation underscores their ability to meet short-term obligations promptly and efficiently.

<u>Non-Current Assets</u>

As stated above, BP has $176.1 billion in total non-current assets, including $278.6 billion in gross PPE and $216.5 billion in properties, which indicates that BP is focused on long-term investments in the form tangible assets.

The net PPE stands at $109 billion, reflecting the value of tangible assets after accounting for accumulated depreciation. With goodwill and other intangible assets amounting to $18.1 billion, including goodwill at $12.5 billion and other intangible assets at $5.7 billion, BP holds valuable intangible assets which contribute to its overall non-current assets. The inclusion of a defined pension benefit, valued at $7.95 billion, shows BP is committed to providing retirement benefits for its employees, highlighting a balance between financial stability and employee welfare.

BP's total non-current assets provides insights into BPs allocation of resources towards long-term investments in tangible and intangible assets, and even employee benefits. These highlight the company's focus on building a robust foundation for future growth and stability.

<u>Liability Composition</u>

BP's liabilities are comprised of $86.1 billion in current liabilities and $108.7 billion in non-current liabilities. The $86.1 billion in current liabilities are obligations to be paid within one year. They would include accounts payable, short-term debt, and other liabilities due in the near future. The company also carries $108.7 billion in non-current liabilities, which are obligations that are not due within one year. These obligations would include long-term debt and other extended payment commitments.

<u>Current Liabilities</u>

Current liabilities are listed to amount to $86.1 billion, including current provisions ($4.4 billion) and current debt and capital lease obligation ($5.9 billion). It is assumed that the inclusion of accounts payable and accrued compensation would bring the total to $86.1 billion.

<u>Non-Current Liabilities</u>

Non-current liabilities are listed to amount to $108.7 billion, including long-term provisions ($14.7 billion), long-term debt and capital lease obligation ($57.1 billion), trade and other payables non-current ($10.1 billion), non-current accrued expenses ($1.3 billion), and derivative product liabilities ($10.4 billion). It is assumed that the inclusion of an additional non-current liability would bring the total to $108.7 billion.

<u>Financing Structure</u>

The financing structure is comprised of debt and equity. BP has financed its operations and investments by utilizing $194 billion of debt and $85 billion of equity.

The $194 billion of debt represents the amount of money the company has borrowed from various sources such as banks, bondholders, or other financial institutions. This debt will need to be paid of over time, typically with interest. Debt allows a company to benefit from tax advantages – a reward for borrowing debt and reciprocity in the economy.

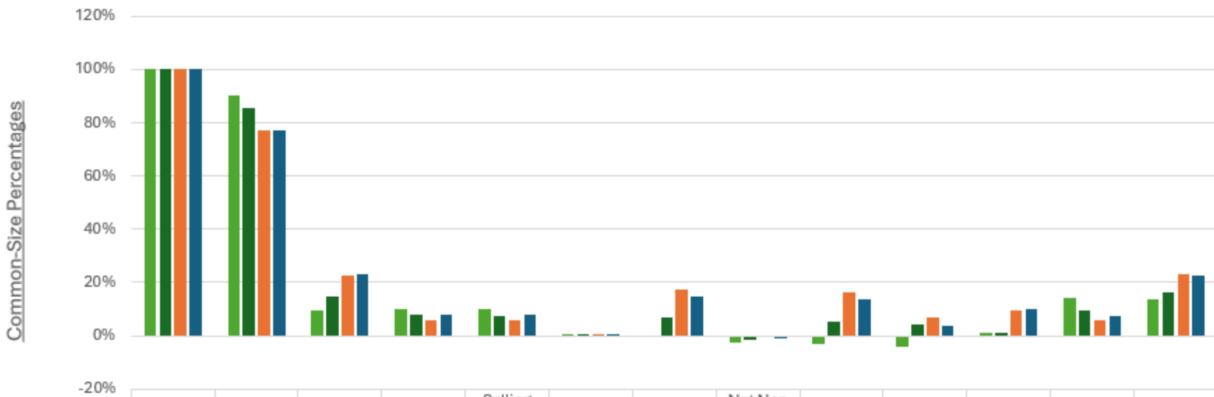
The $85 billion in equity refers to the ownership stake held by shareholders in the company. Equity represents of the portion of the company's value that belongs to the shareholders after all liabilities have been paid off. Shareholders take on the riskiest position in the company, as they come last in the payment hierarchy, and if there is nothing left after the liabilities are paid, they will receive nothing. This also means that their return is the greatest, as a reward for taking on the most risk.

The debt-equity ratio, in this case 2.28, considers BP to be leveraged. This means that they can amplify returns for shareholders when the company performs well, but it also increases financial risk due to high debt obligations, which include interest.

BP AMOCO's significant investments into PPE related to oil and gas exploration and production poses a risk with its continued reliance on fossil fuels. This will require BP to strategize its investments and venture into repurposing of its assets to shape the growing market for renewable energy. Additionally, the high volume of cash flows provided through this business model relieves the firms of its liabilities, which could increase with changes in global policies and regulations. BP's liquidity and diversification will be a key part in determining its ability to thrive through long-term risks and remain competitive against larger competitors.

Common Size Financials

Common Size Income Statements 12/31/2020 - 12/31/2023
Vertical Analysis

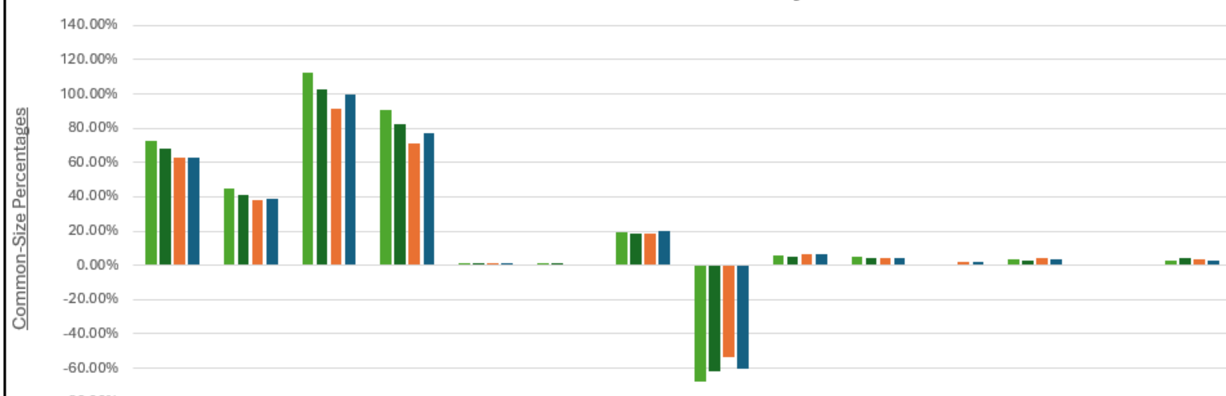


	Total Revenue	Cost of Revenue (COR, COGS)	Gross Profit (Income)	Operating Expense	Selling General and Administrative	Other Operating Expenses	Operating Profit (Income)	Net Non Operating Interest Income Expense	Pretax Income	Tax Provision	Net Profit (Income)	Reconciled Depreciation	EBITDA
12/31/2020	100%	90.39%	9.61%	10.15%	9.81%	0.34%	-0.54%	-2.35%	-2.89%	-3.93%	1.04%	14.05%	13.51%
12/31/2021	100%	85.51%	14.49%	7.73%	7.56%	0.16%	6.77%	-1.44%	5.32%	4.27%	1.05%	9.39%	16.15%
12/31/2022	100%	77.18%	22.82%	5.65%	5.57%	0.08%	17.17%	-0.63%	16.54%	6.94%	9.59%	5.93%	23.10%
12/31/2023	100%	77.12%	22.88%	8.10%	7.98%	0.12%	14.78%	-0.93%	13.84%	3.74%	10.10%	7.58%	22.36%

Income Statement Components

12/31/2020 12/31/2021 12/31/2022 12/31/2023

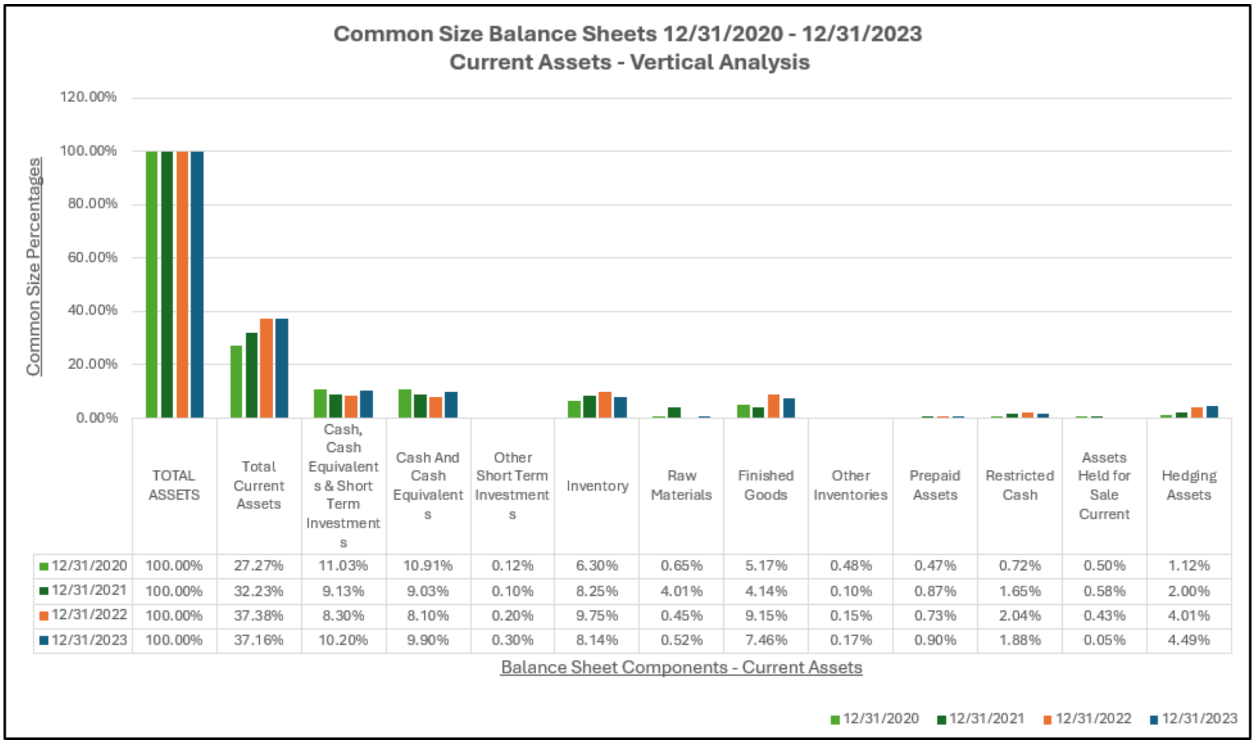
Common Size Balance Sheets 12/31/2020 - 12/31/2023
Non-Current Assets - Vertical Analysis



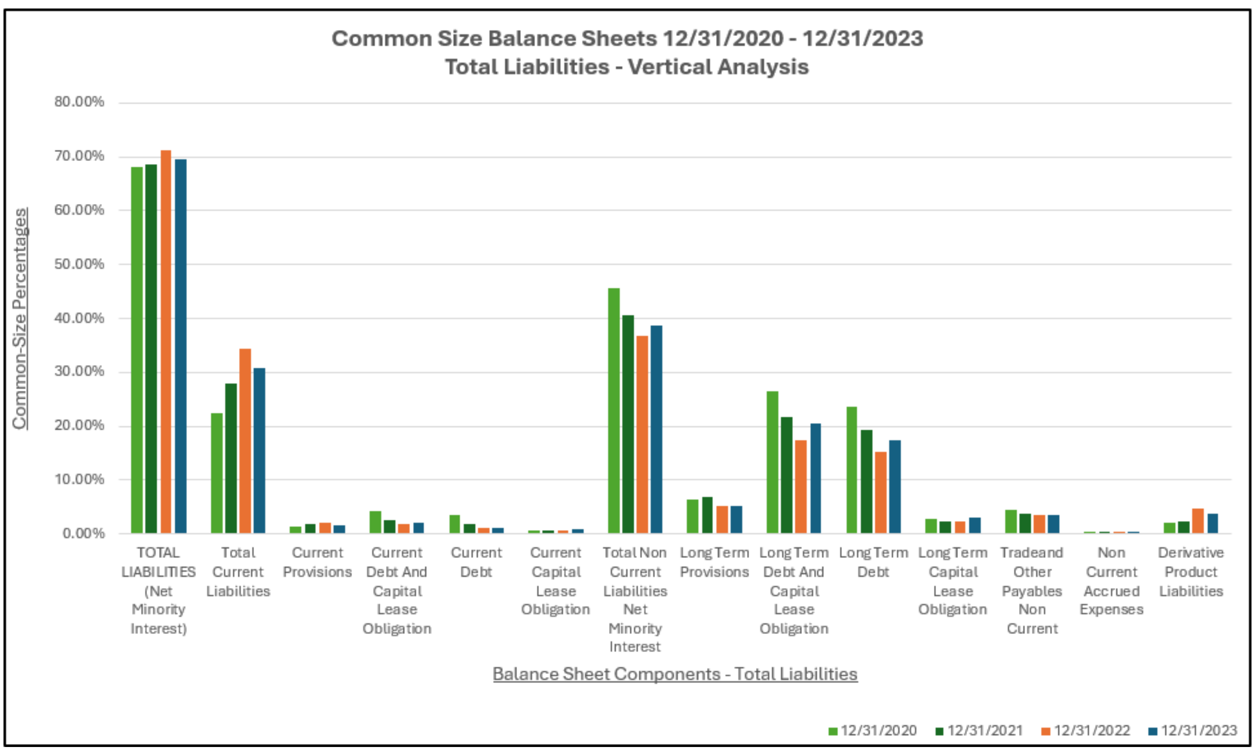
	Total Non-Current assets	Net PPE	Gross PPE	Properties	Land And Improvements	Buildings And Improvements	Machinery Furniture Equipment	Accumulated Depreciation	Goodwill And Other Intangible Assets	Goodwill	Other Intangible Assets	Financial Assets	Non Current Prepaid Assets	Defined Pension Benefit
12/31/2020	72.73%	44.44%	112.52%	90.71%	1.45%	0.92%	19.45%	-68.08%	5.40%	4.66%	0.74%	3.64%	0.20%	2.97%
12/31/2021	67.77%	40.79%	102.66%	82.22%	1.29%	0.90%	18.26%	-61.87%	5.06%	4.31%	0.75%	2.44%	0.17%	4.15%
12/31/2022	62.62%	38.27%	91.65%	71.24%	1.22%	0.73%	18.47%	-53.39%	6.23%	4.15%	2.08%	4.46%	0.20%	3.22%
12/31/2023	62.84%	38.90%	99.41%	77.23%	1.40%	0.80%	19.98%	-60.50%	6.47%	4.45%	2.02%	3.56%	0.22%	2.84%

Balance Sheet Components - Non-Current Assets

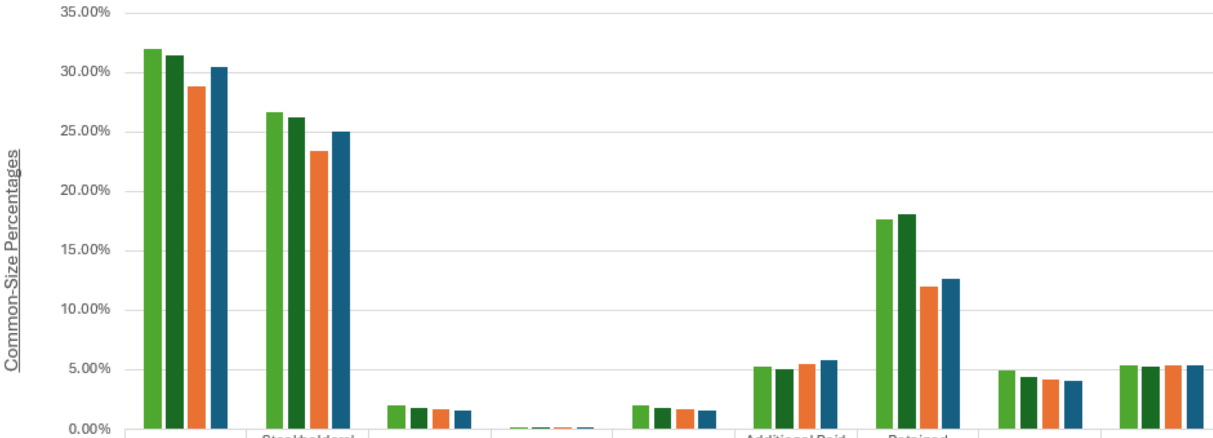
12/31/2020 12/31/2021 12/31/2022 12/31/2023



	TOTAL ASSETS	Total Current Assets	Cash, Cash Equivalents & Short Term Investments	Cash And Cash Equivalents	Other Short Term Investments	Inventory	Raw Materials	Finished Goods	Other Inventories	Prepaid Assets	Restricted Cash	Assets Held for Sale Current	Hedging Assets
12/31/2020	100.00%	27.27%	11.03%	10.91%	0.12%	6.30%	0.65%	5.17%	0.48%	0.47%	0.72%	0.50%	1.12%
12/31/2021	100.00%	32.23%	9.13%	9.03%	0.10%	8.25%	4.01%	4.14%	0.10%	0.87%	1.65%	0.58%	2.00%
12/31/2022	100.00%	37.38%	8.30%	8.10%	0.20%	9.75%	0.45%	9.15%	0.15%	0.73%	2.04%	0.43%	4.01%
12/31/2023	100.00%	37.16%	10.20%	9.90%	0.30%	8.14%	0.52%	7.46%	0.17%	0.90%	1.88%	0.05%	4.49%



Common Size Balance Sheets 12/31/2020 - 12/31/2023
Total Equity - Vertical Analysis

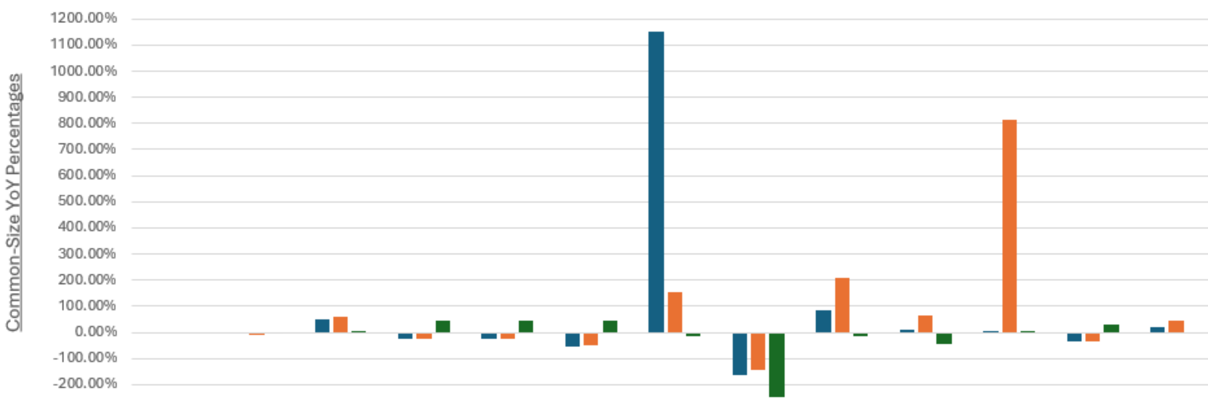


	TOTAL EQUITY	Stockholders' Equity	Capital Stock	Preferred Stock	Common Stock	Additional Paid in Capital	Retained Earnings	Treasury Stock	Minority Interest
12/31/2020	31.97%	26.62%	2.01%	0.01%	2.00%	5.27%	17.67%	4.94%	5.35%
12/31/2021	31.48%	26.27%	1.82%	0.01%	1.81%	5.03%	18.04%	4.39%	5.21%
12/31/2022	28.80%	23.45%	1.66%	0.01%	1.66%	5.51%	12.05%	4.22%	5.36%
12/31/2023	30.50%	25.07%	1.60%	0.01%	1.60%	5.82%	12.61%	4.04%	5.43%

Balance Sheet Components - Total Equity

12/31/2020 12/31/2021 12/31/2022 12/31/2023

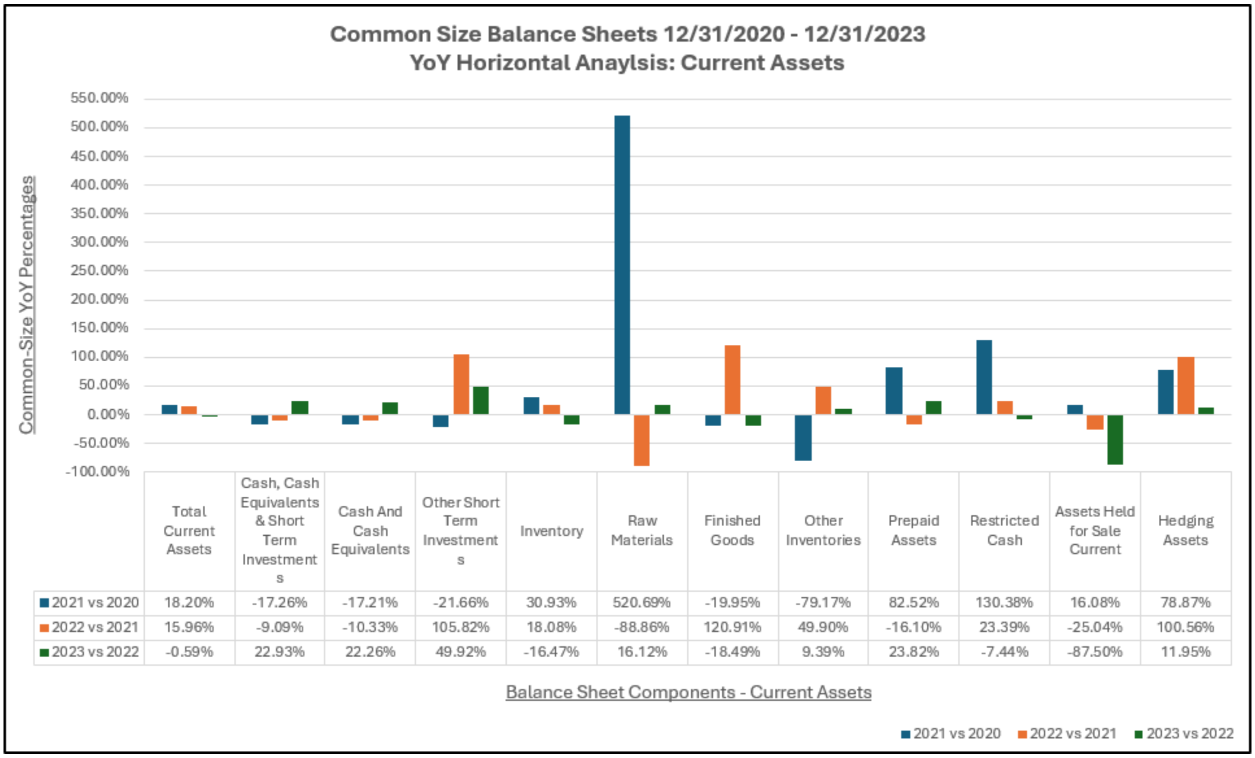
Common Size Income Statements 12/31/2020 - 12/31/2023
YoY Horizontal Anaylsis



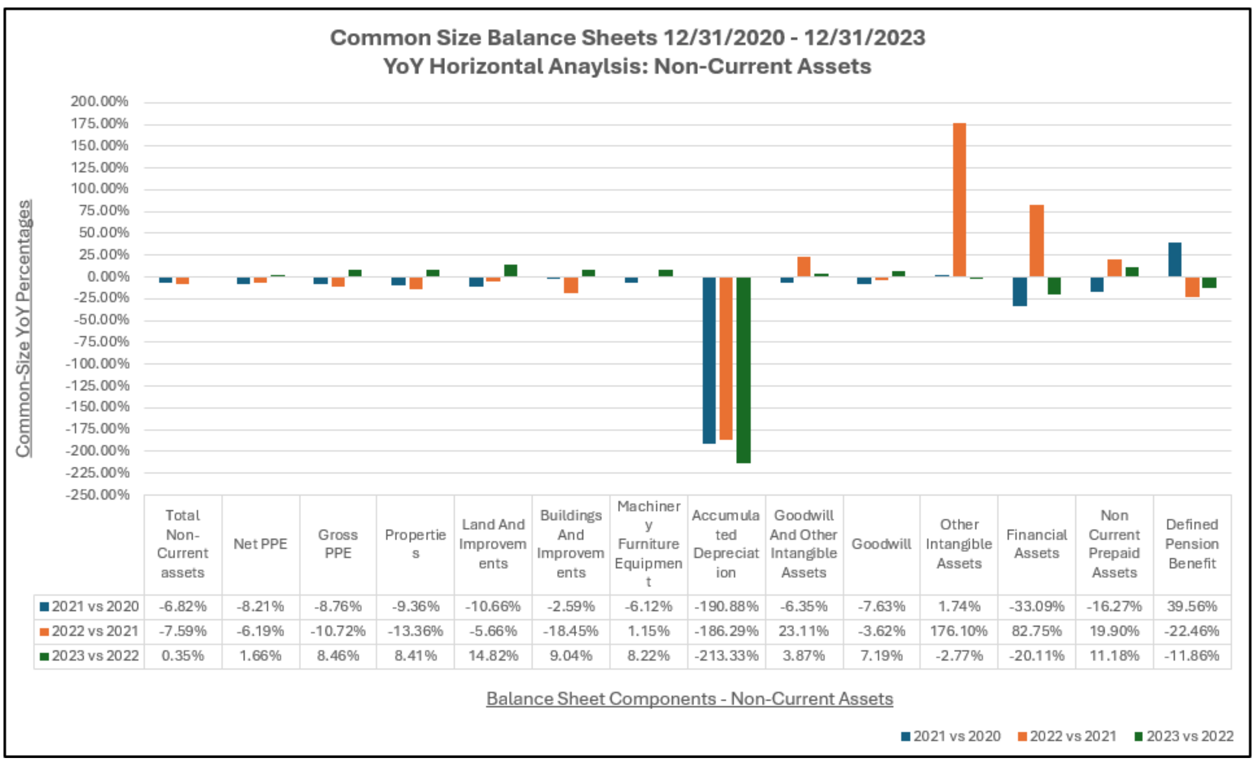
	Total Revenue	Cost of Revenue (COR, COGS)	Gross Profit (Income)	Operating Expense	Selling General and Administrative	Other Operating Expenses	Operating Profit (Income)	Net Non Operating Interest Income Expense	Pretax Income	Tax Provision	Net Profit (Income)	Reconciled Depreciation	EBITDA
2021 vs 2020	0.00%	-5.40%	50.76%	-23.90%	-22.93%	-52.05%	1150.92%	-161.46%	84.45%	8.84%	1.14%	-33.21%	19.53%
2022 vs 2021	0.00%	-9.74%	57.49%	-26.82%	-26.34%	-49.15%	153.78%	-143.99%	210.59%	62.51%	812.55%	-36.80%	43.03%
2023 vs 2022	0.00%	-0.07%	0.23%	43.27%	43.26%	44.17%	-13.94%	-247.37%	-16.29%	-46.07%	5.26%	27.79%	-3.23%

Income Statement Components

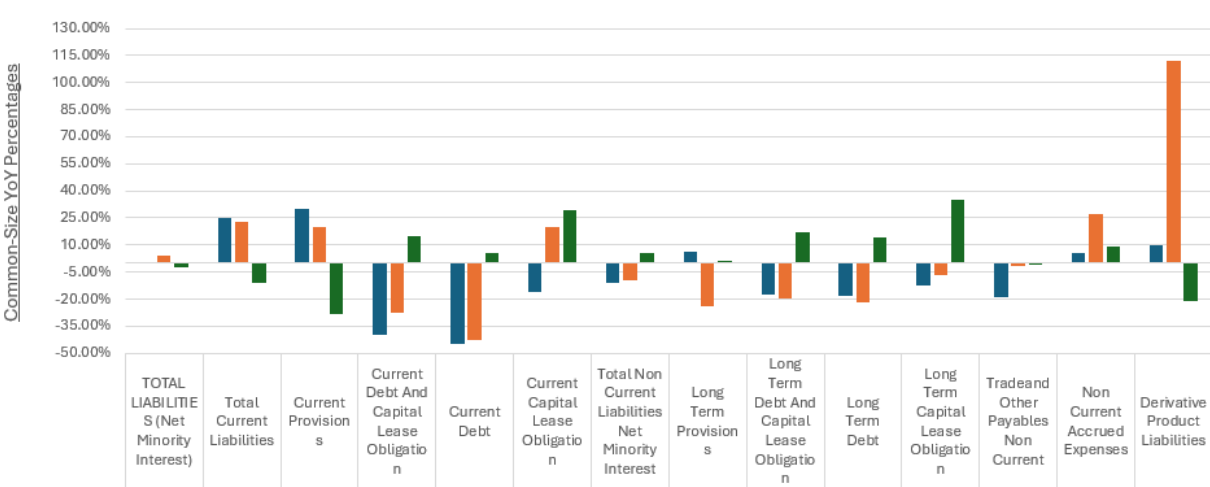
2021 vs 2020 2022 vs 2021 2023 vs 2022



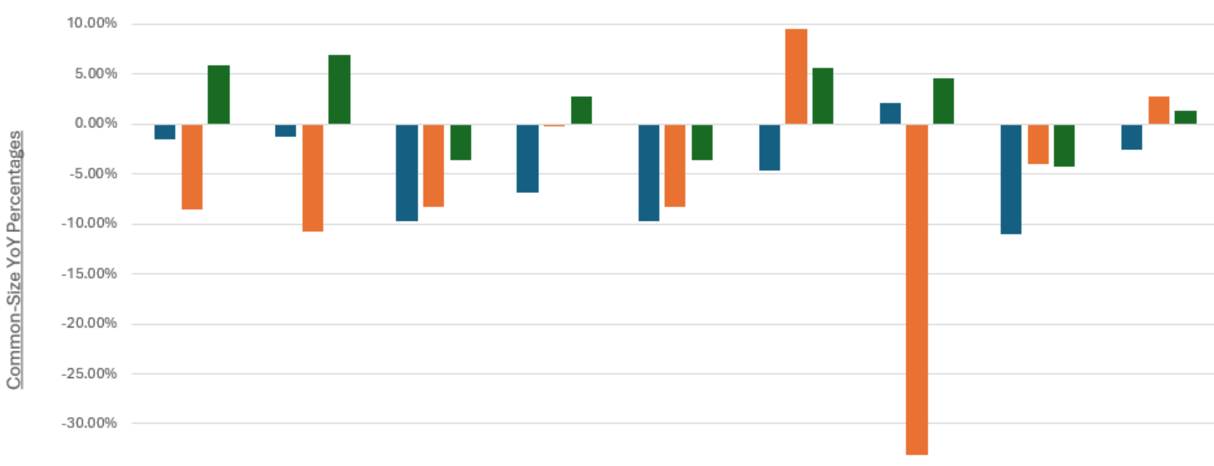
	Total Current Assets	Cash, Cash Equivalents & Short Term Investments	Cash And Cash Equivalents	Other Short Term Investments	Inventory	Raw Materials	Finished Goods	Other Inventories	Prepaid Assets	Restricted Cash	Assets Held for Sale Current	Hedging Assets
2021 vs 2020	18.20%	-17.26%	-17.21%	-21.66%	30.93%	520.69%	-19.95%	-79.17%	82.52%	130.38%	16.08%	78.87%
2022 vs 2021	15.96%	-9.09%	-10.33%	105.82%	18.08%	-88.86%	120.91%	49.90%	-16.10%	23.39%	-25.04%	100.56%
2023 vs 2022	-0.59%	22.93%	22.26%	49.92%	-16.47%	16.12%	-18.49%	9.39%	23.82%	-7.44%	-87.50%	11.95%



	Total Non-Current assets	Net PPE	Gross PPE	Properties	Land And Improvements	Buildings And Improvements	Machinery Furniture Equipment	Accumulated Depreciation	Goodwill And Other Intangible Assets	Goodwill	Other Intangible Assets	Financial Assets	Non Current Prepaid Assets	Defined Pension Benefit
2021 vs 2020	-6.82%	-8.21%	-8.76%	-9.36%	-10.66%	-2.59%	-6.12%	-190.88%	-6.35%	-7.63%	1.74%	-33.09%	-16.27%	39.56%
2022 vs 2021	-7.59%	-6.19%	-10.72%	-13.36%	-5.66%	-18.45%	1.15%	-186.29%	23.11%	-3.62%	176.10%	82.75%	19.90%	-22.46%
2023 vs 2022	0.35%	1.66%	8.46%	8.41%	14.82%	9.04%	8.22%	-213.33%	3.87%	7.19%	-2.77%	-20.11%	11.18%	-11.86%



	TOTAL LIABILITIES (Net Minority Interest)	Total Current Liabilities	Current Provisions	Current Debt And Capital Lease Obligation	Current Debt	Current Capital Lease Obligation	Total Non Current Liabilities Net Minority Interest	Long Term Provisions	Long Term Debt And Capital Lease Obligation	Long Term Debt	Long Term Capital Lease Obligation	Tradeand Other Payables Non Current	Non Current Accrued Expenses	Derivative Product Liabilities
2021 vs 2020	0.72%	25.09%	30.21%	-39.73%	-44.68%	-15.79%	-11.20%	6.02%	-17.58%	-18.14%	-12.74%	-18.71%	5.86%	9.58%
2022 vs 2021	3.91%	22.97%	20.12%	-27.65%	-42.62%	19.97%	-9.22%	-23.63%	-19.91%	-21.58%	-6.35%	-1.99%	27.00%	112.35%
2023 vs 2022	-2.38%	-10.64%	-28.28%	15.09%	5.56%	29.59%	5.32%	0.93%	17.02%	14.36%	35.06%	-0.29%	9.21%	-21.01%



	TOTAL EQUITY	Stockholders' Equity	Capital Stock	Preferred Stock	Common Stock	Additional Paid in Capital	Retained Earnings	Treasury Stock	Minority Interest
2021 vs 2020	-1.53%	-1.32%	-9.74%	-6.83%	-9.75%	-4.60%	2.06%	-11.06%	-2.55%
2022 vs 2021	-8.51%	-10.75%	-8.32%	-0.29%	-8.36%	9.52%	-33.17%	-4.01%	2.77%
2023 vs 2022	5.89%	6.95%	-3.62%	2.79%	-3.65%	5.64%	4.59%	-4.23%	1.28%

Common-Size Income Statement Analysis

The following observations were identified during our analysis of Common-Size Income Statement:

- *Cost of Goods Sold (vertical):* The Cost of Goods Sold (COGS) was at its highest in 2020 at 90.39%, despite BP's revenues being significantly reduced due to the pandemic. That raises the question: why would production costs be elevated when sales were down? One possibility is due to the widespread supply chain issues that were ongoing (and still remain today to some extent) during the pandemic. Global supply chain issues typically led to higher costs for raw materials, transportation, and other production-related expenses. These disruptions could have forced BP to pay a premium for raw materials, even as their sales volume decreased in 2020, thereby increasing the Cost of Goods Sold.

- *Gross Profit vs. Operating Profit (vertical)*: Both Gross Profit and Operating Profit are cash indicators as learned in class. While Gross Profit shows a consistent upward trend from 2020 – 2023, Operating Profit shows a significant increase in 2022, followed by a decline in 2023. The contrast in these trends could be attributed to an increase in operating expenses in 2023, likely driven by the company's new strategy and shift towards renewable energy initiatives. The investments required for developing these projects could have led to higher costs, impacting Operating Profit despite the continued growth in Gross Profit.

- *Operating Profit (horizontal*): The most notable change seen in the horizontal analysis of the Income Statement occurred in Operating Profit when comparing 2021 vs. 2020. In 2021, there was a significant increase of 1150.92%. This surge can be attributed to the recovery from the impact of COVID, which caused a -$573 million Operating Profit in 2020, compared to the $10.7 billion recovery in 2021. This reflects a substantial turnaround in financial performance as economic conditions improved post-pandemic.

- Net Profit (horizontal*)*: In simplistic terms, Net Profit is calculated by subtracting all expenses and costs associated with generating revenue from the total revenue of a company. In 2022, BP's Net Profit saw a substantial increase of 812.55%. Why such a huge jump? Firstly, revenues increased by over 50% from 2021 to 2022. Additionally, Cost of Revenue decreased 9.74%, Operating Expenses were reduced by 26.82%, and other operating expenses decreased by nearly 50%. These improvements collectively contributed to a higher net profit. This significant increase suggests that BP's profitability recovered strongly in 2022, likely due to higher revenues in combination with effective cost management.

Common-Size Balance Sheet Analysis
The following observations were identified during our analysis of Common-Size Balance Sheet:

- *Current Assets – Raw Materials (horizontal)*: There was a notable 520.69% increase in Raw Materials in 2021 vs. 2020. This increase could have been attributed to several factors:
    - *Increased Demand*: The most significant factor was the increase in demand in 2021, which followed the near-total collapse of 2020. As economies recovered, the demand for oil, natural gas, and related products would have surged, driving up both the volume and cost of raw materials.
    - *Higher Prices:* Increased demand would have also led to higher prices for raw materials. Companies needed to obtain more resources to meet this rising demand, often at higher prices.
    - *Supply Chain Issues:* Global supply chain disruptions resulted in higher transportation costs and forced companies to source materials from non-preferred vendors at higher prices. These logistical challenges added to the overall increase in raw material costs.
    - *Inflation:* Inflation began to rise as economies recovered. According to Statista, global inflation increased from 3.24% in 2020 to 4.71% in 2021.

- *Non-Current Assets - Other Intangible Assets (horizontal):* There was a significant increase in Other Intangible Assets in 2022 v 2021. The 176.1% increase in 2022 could be attributed to BP’s 2022 acquisitions of Archaea Energy for $4.1 billion, as well as EDF Energy Services. Both of these acquisitions were strategic in nature as BP continues to expand its energy business. Acquiring companies with valuable technology can result in higher intangible assets due to the inclusion of developed technology, in addition to patents, trademarks, customer lists, and other intellectual property.

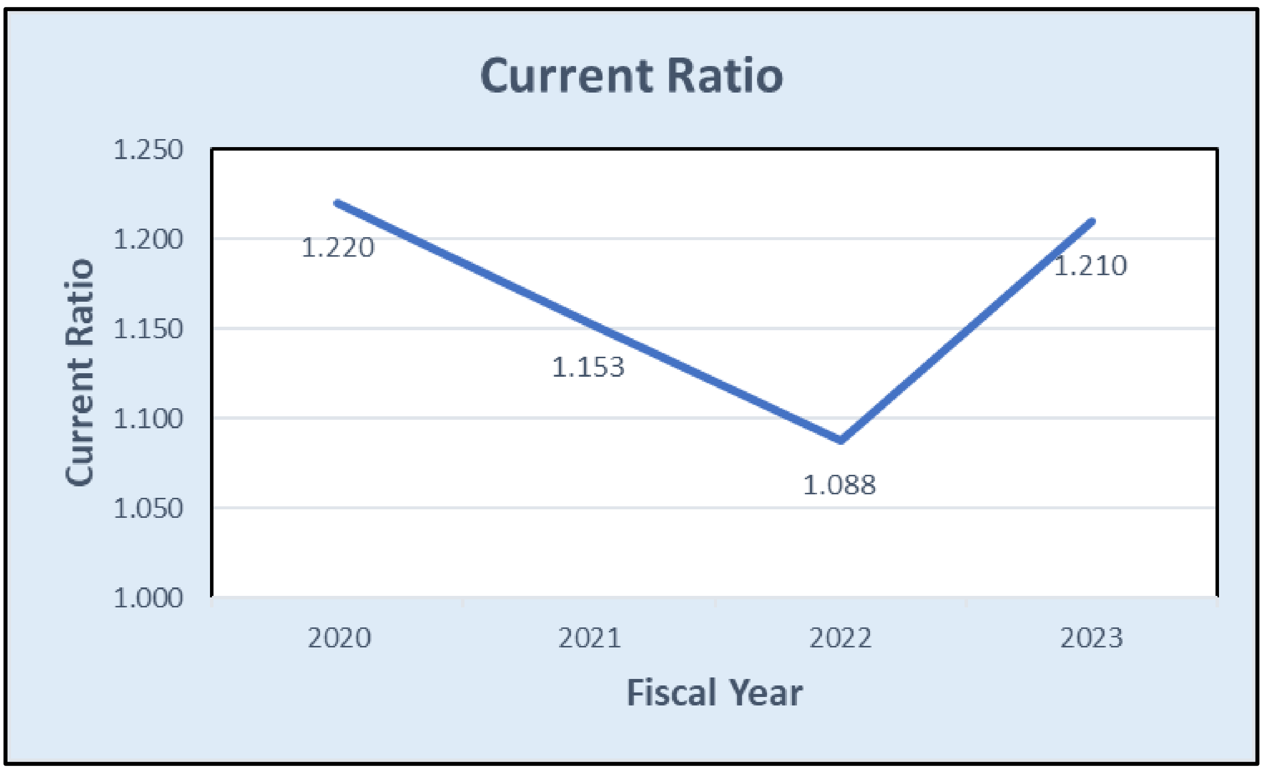
- *Non-Current Assets – Financial Assets (horizontal)*: There was also a notable jump in Financial Assets in 2022 vs. 2021. This 82.75% increase could be related to BP’s 50:50 joint venture with Azule Energy that was formed in 2022. Given the 50:50 split, BP does not have a controlling interest in this joint venture, and this lack of control is what may have classified the investment as a financial asset.

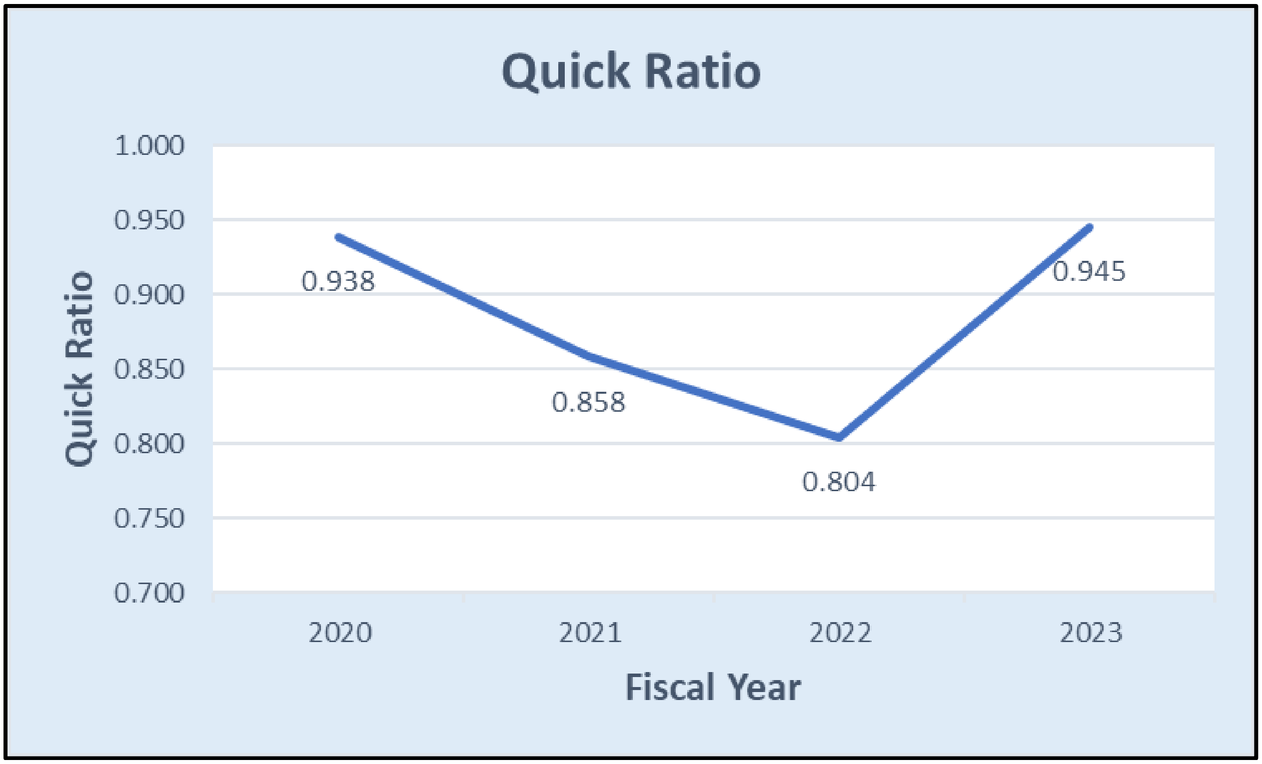
- *Total Current Liabilities vs. Total Non-Current Liabilities (vertical)*: The Total Current Liabilities and Total Non-Current Liabilities have an inverse relationship from 2020 to 2023. As the percentage of total current liabilities increase, the percentage of total non-current liabilities decreases, and vice versa. This inverse correlation suggests a potential link to debt restructuring and strategies. Given the pandemic and the challenging economic conditions, BP may have decided to refinance their short-term obligations into long-term debt. This approach would provide them with extended repayment options during a period of reduced revenues, therefore ensuring that they made payments on time and avoiding any type of technical default.

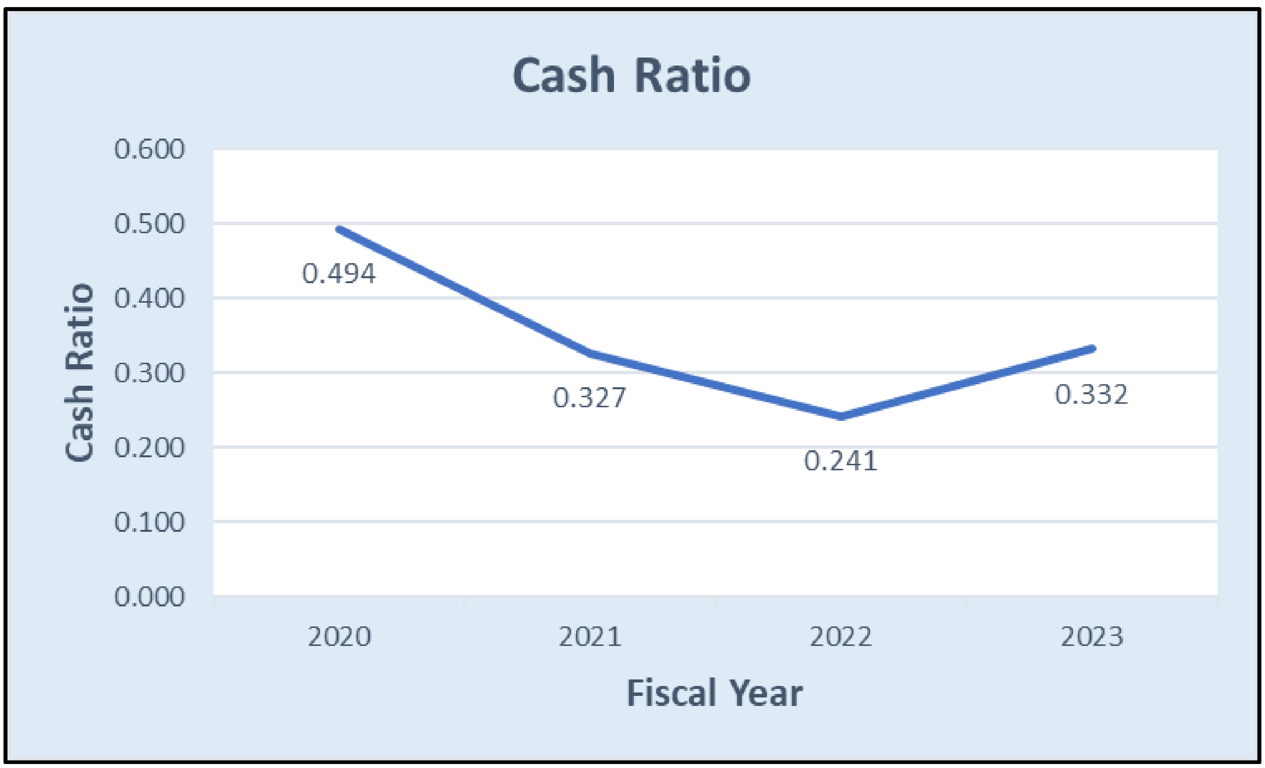
- *Total Liabilities – Derivative Product Liabilities (horizontal)*: There was a notable 112.35% increase in Derivative Product Liabilities in 2022 vs. 2021. While the precise nature of Derivative Product Liabilities is still unclear, this notable rise coincides with the increases of Other Intangible Assets and Financial Assets, suggesting a connection to the 2022 acquisitions.

- *Equity – Retained Earnings (horizontal)*: The most significant decline in equity is observed in Retained Earnings with a 33.17% drop. BP's acquisition of Archaea Energy, which amounted to $4.1 billion, may have been partially funded through the use of Retained Earnings. This could account for the substantial decrease seen in 2022 compared to 2021.

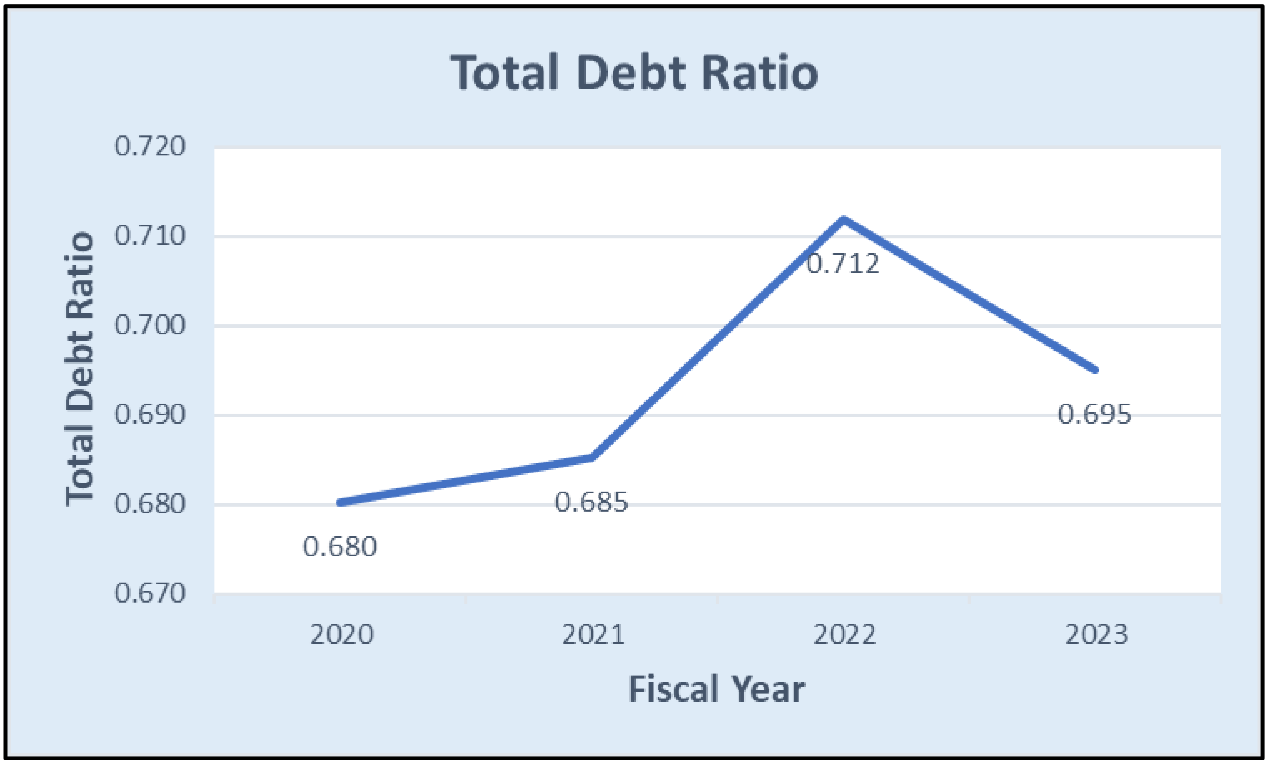
Financial Ratio Analysis: Liquidity

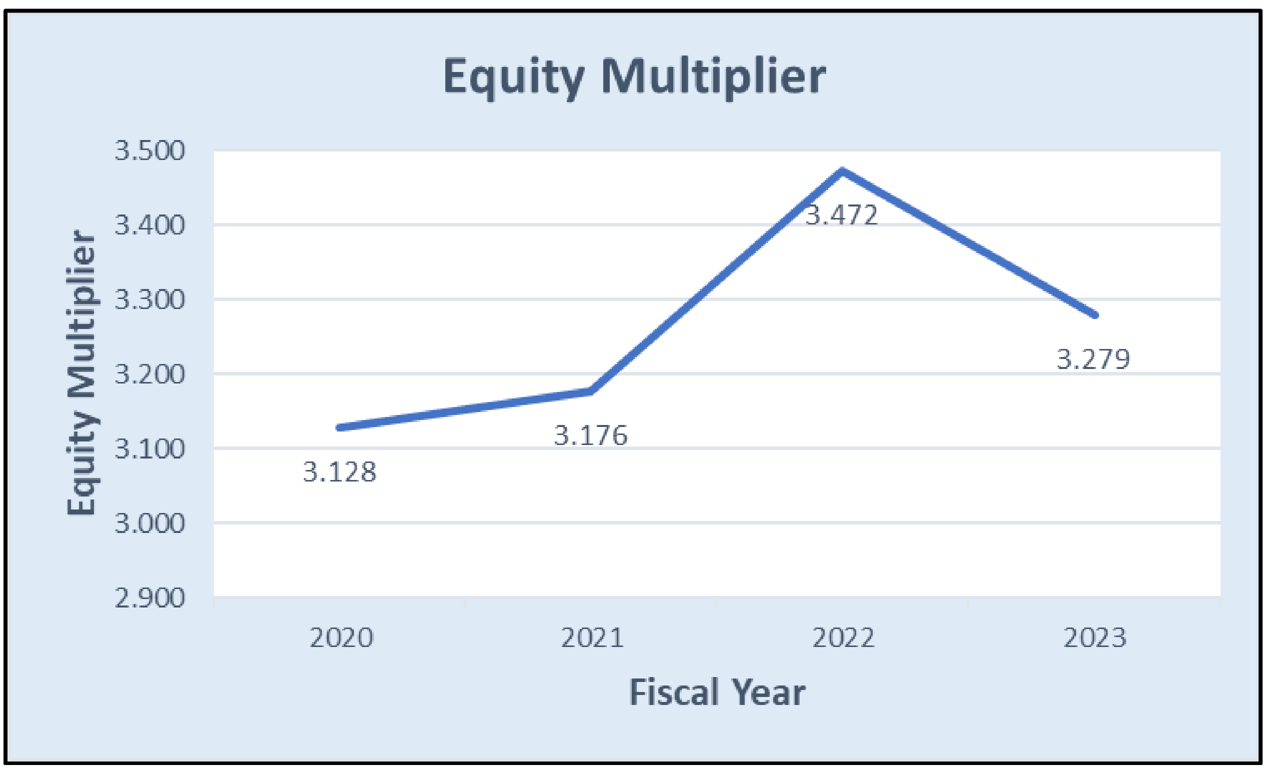



Quick Ratio
1.000
0.950
0.900
0.850
0.800
0.750
0.700
Quick Ratio
0.938
0.858
0.804
0.945
2020
2021
2022
2023
Fiscal Year

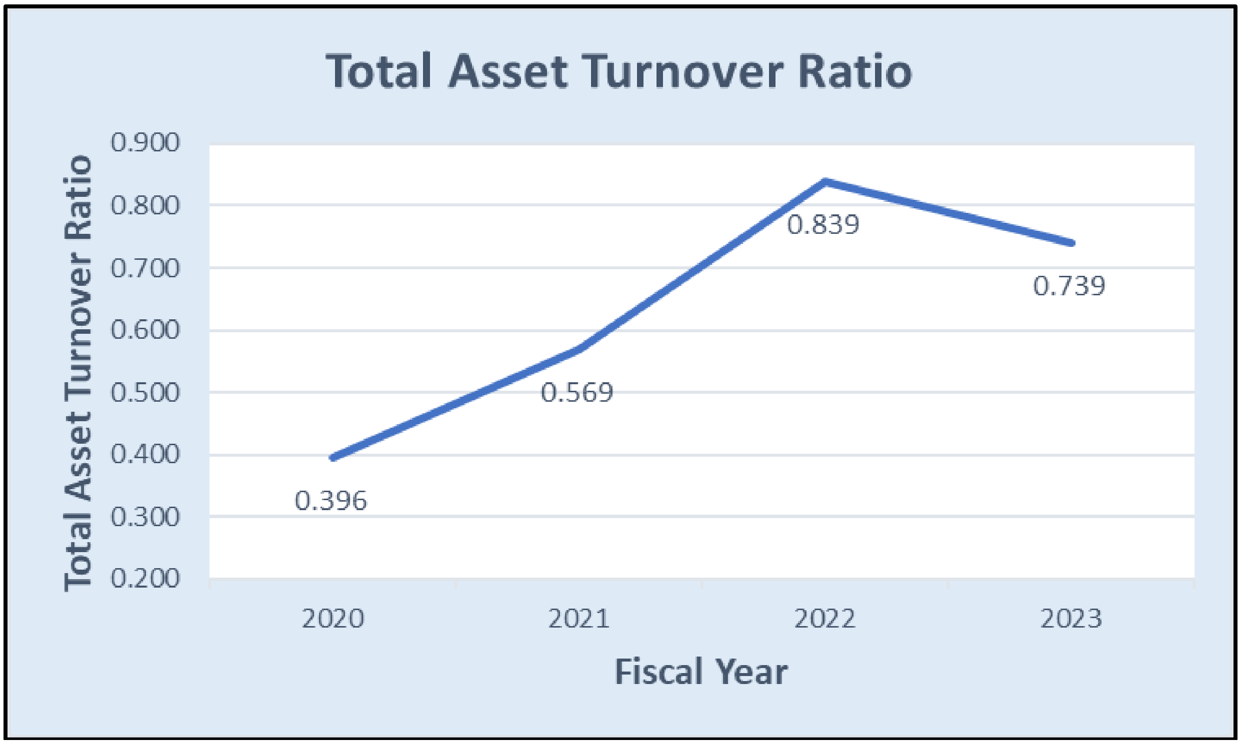

Cash Ratio
0.600
0.500
0.400
0.300
0.200
0.100
0.000
Cash Ratio
0.494
0.327
0.241
0.332
2020
2021
2022
2023
Fiscal Year

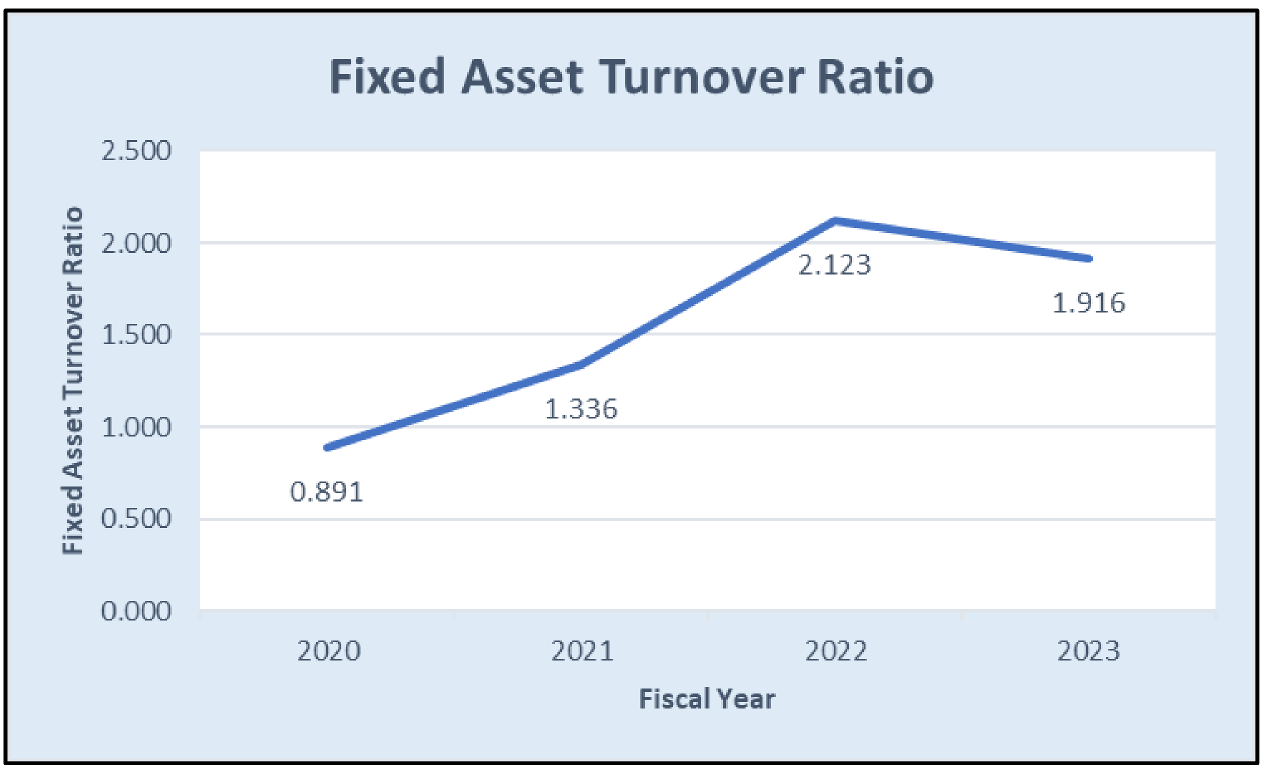
Financial Ratio Analysis: Long-Term Solvency

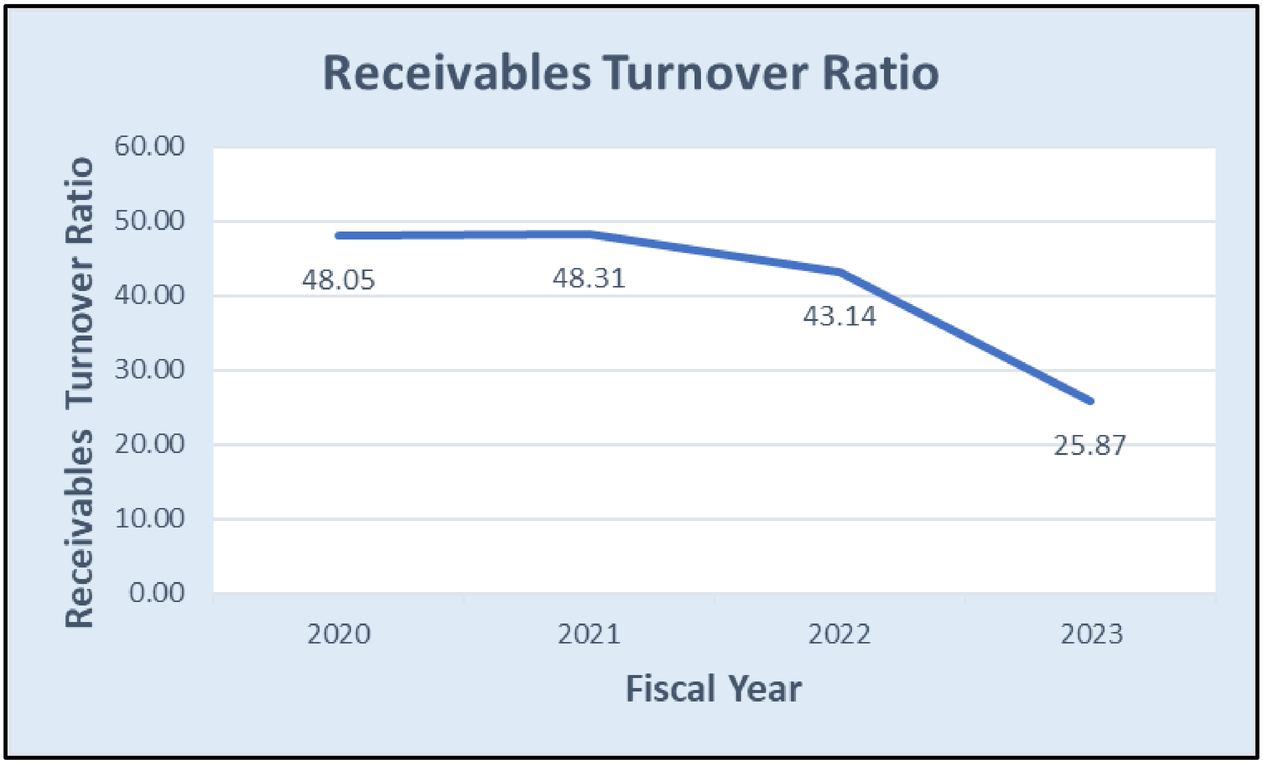


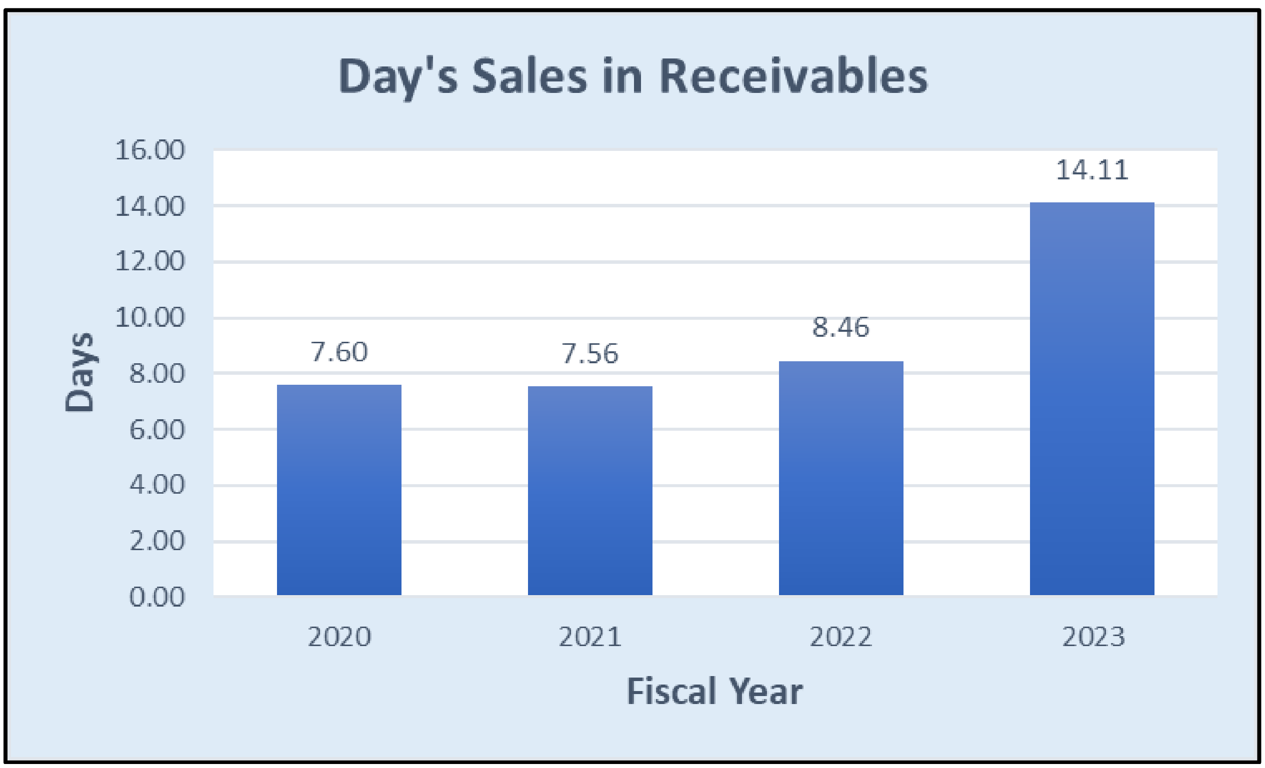


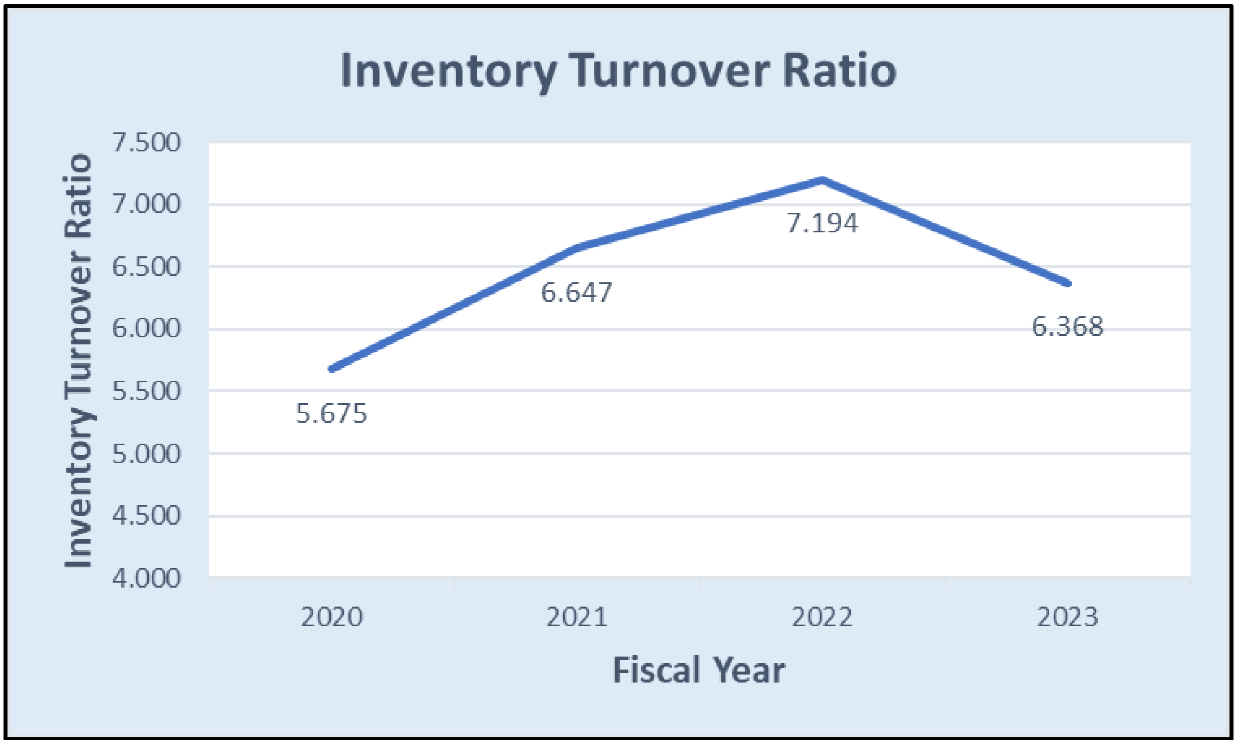
Financial Ratio Analysis: Asset Utilization

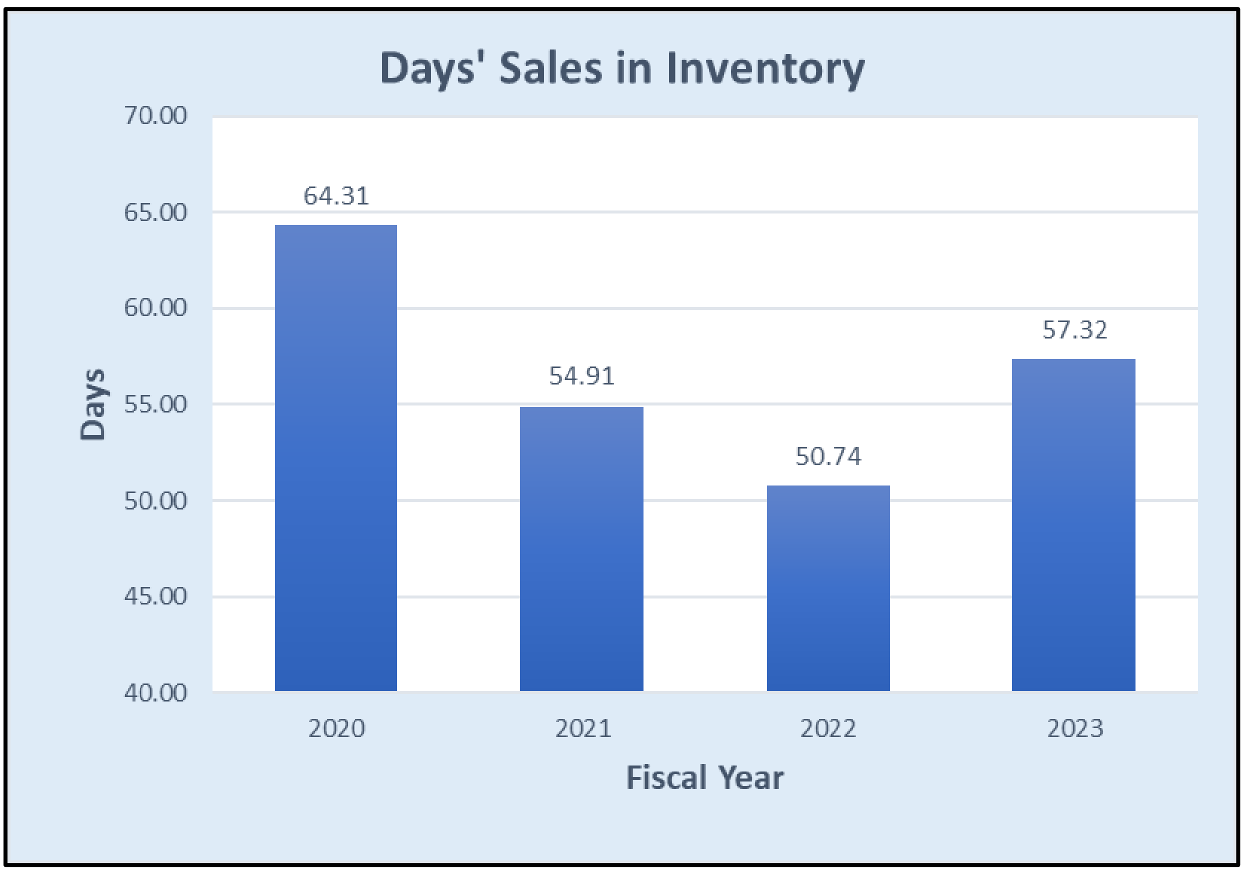


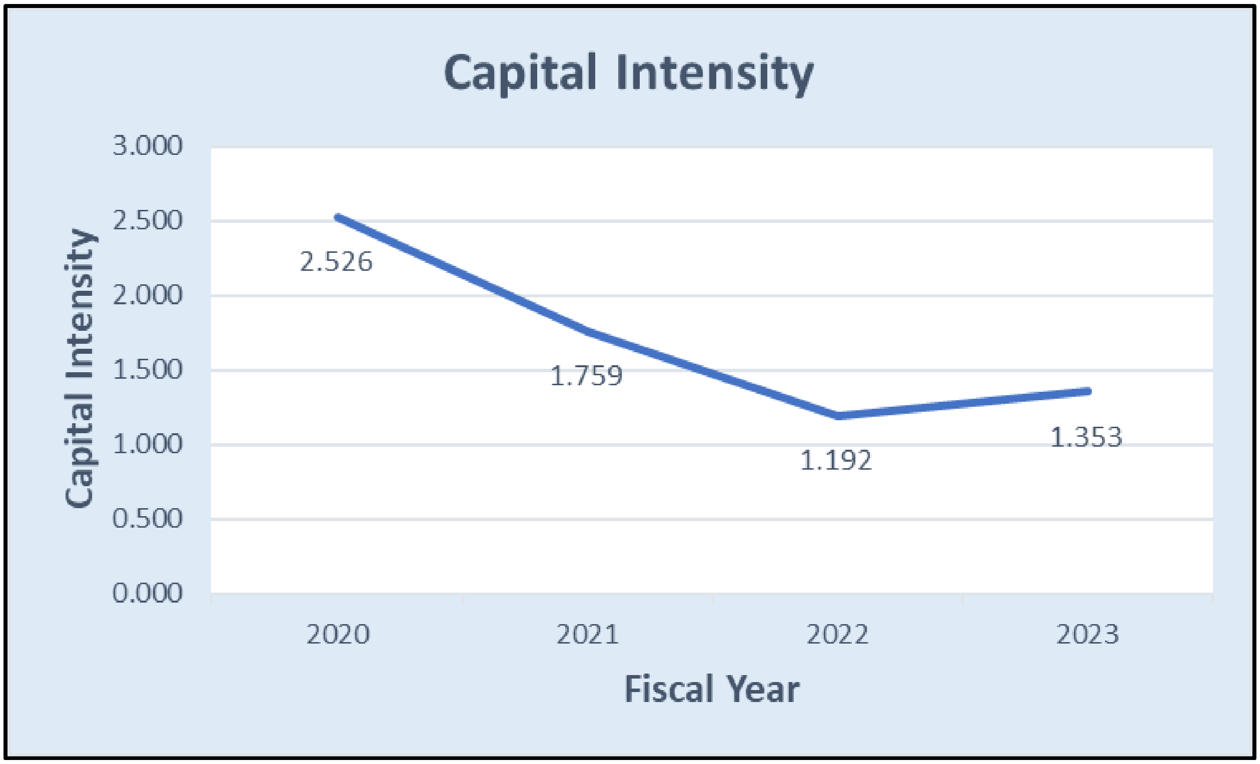



Receivables Turnover Ratio
Receivables Turnover Ratio
60.00
50.00
40.00
30.00
20.00
10.00
0.00
48.05
48.31
43.14
25.87
2020
2021
2022
2023
Fiscal Year

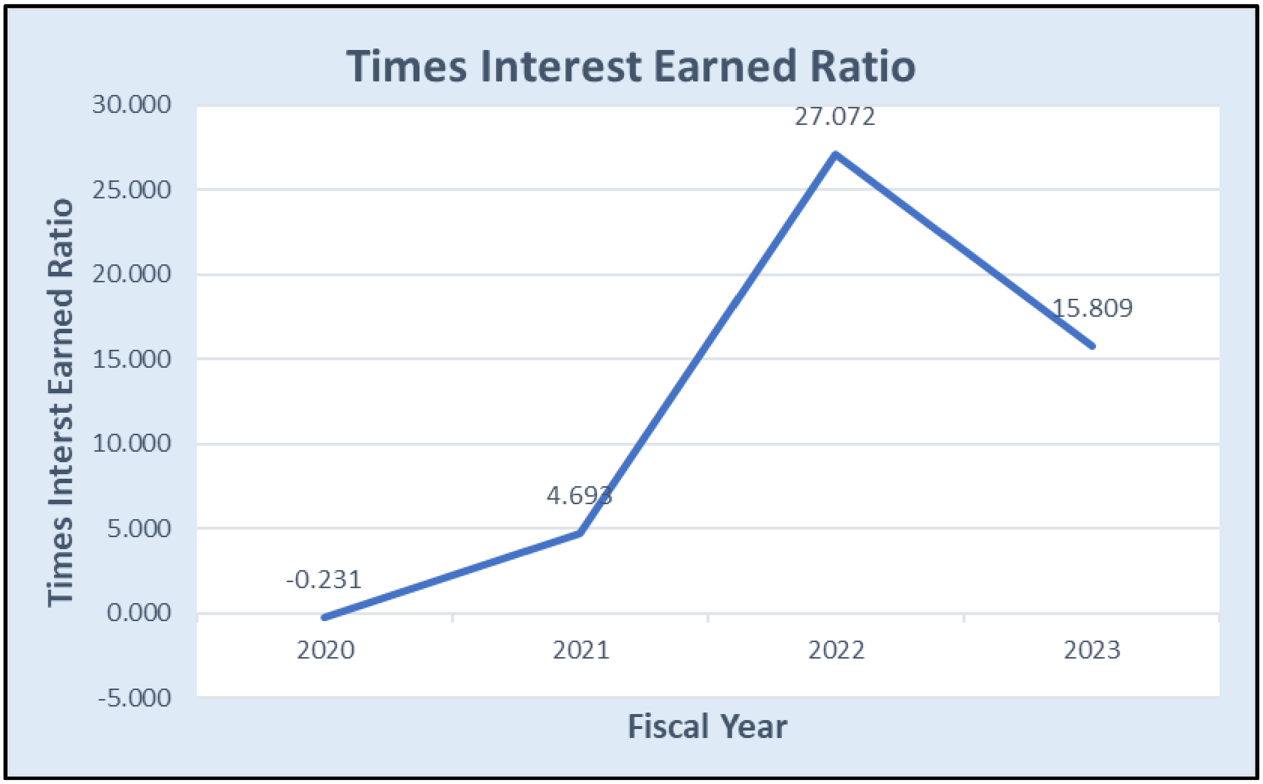

Day's Sales in Receivables
Days
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
7.60
7.56
8.46
14.11
2020
2021
2022
2023
Fiscal Year

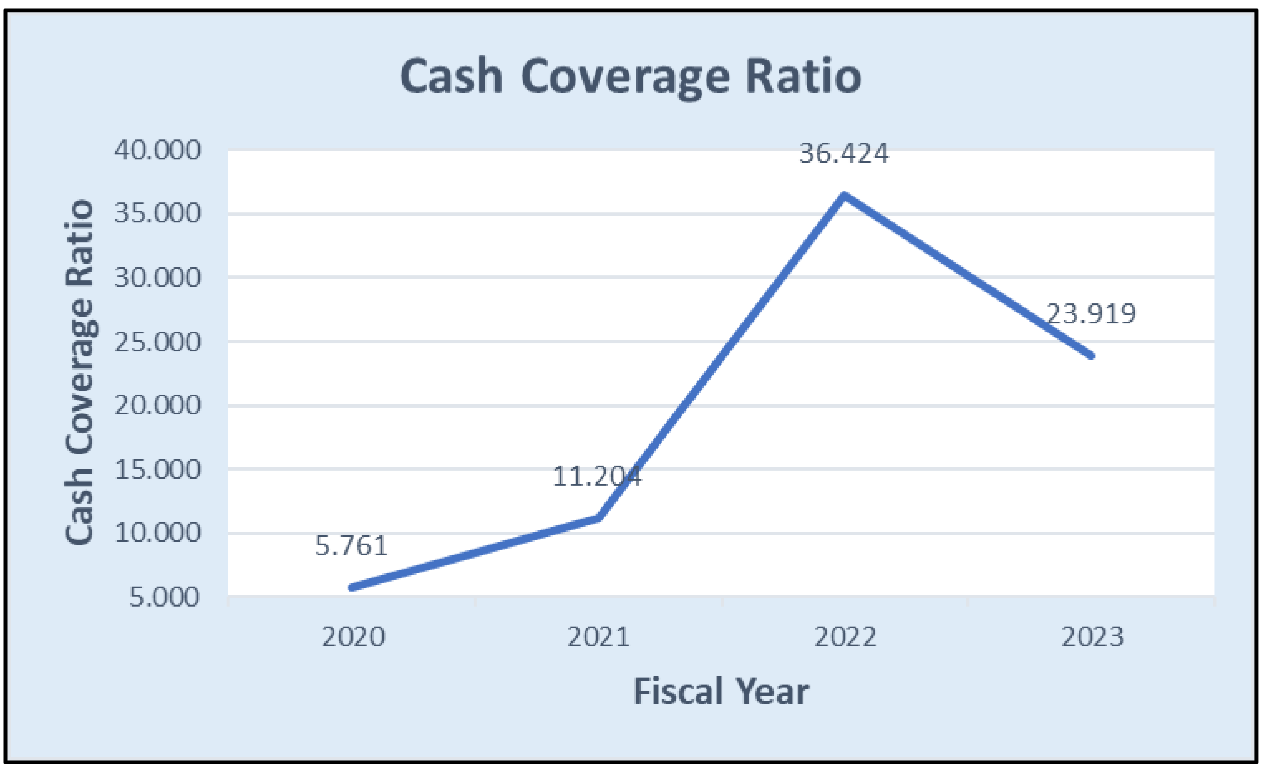

Inventory Turnover Ratio
Inventory Turnover Ratio
7.500
7.000
6.500
6.000
5.500
5.000
4.500
4.000
5.675
6.647
7.194
6.368
2020
2021
2022
2023
Fiscal Year

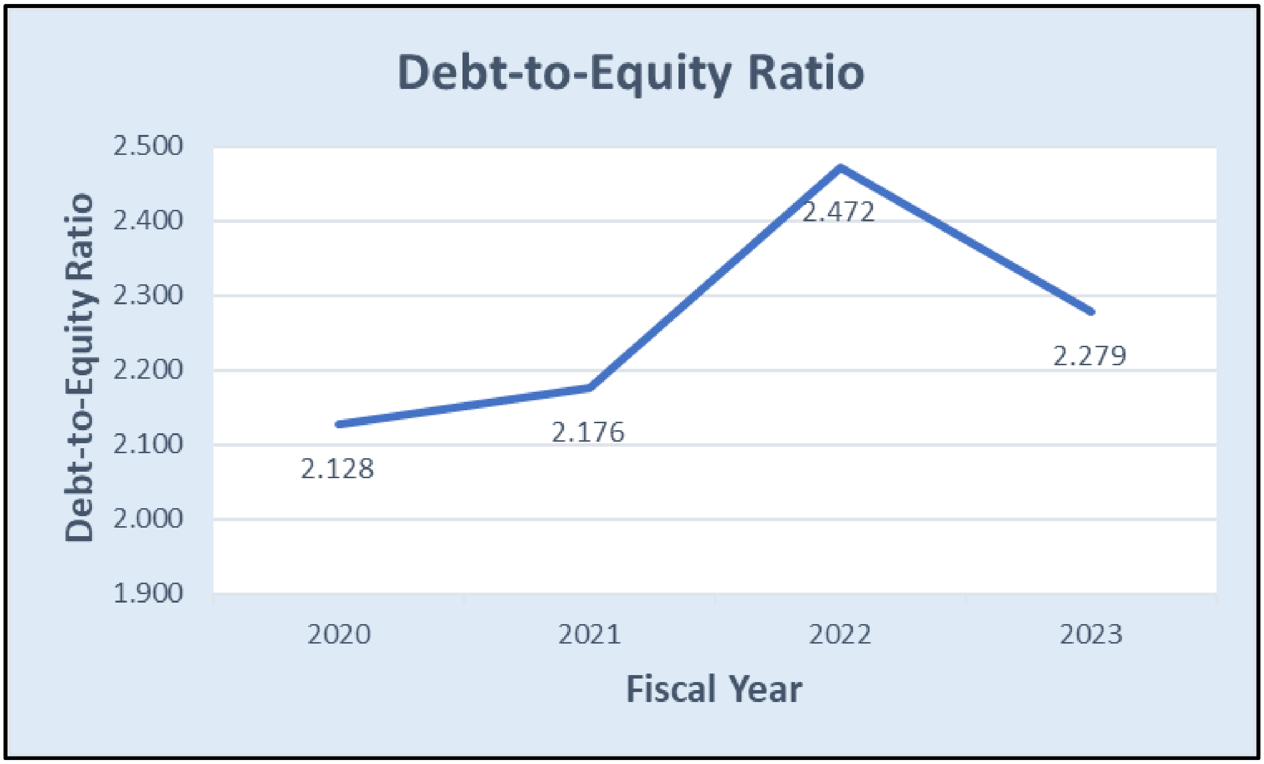

Days' Sales in Inventory
Days
70.00
65.00
60.00
55.00
50.00
45.00
40.00
64.31
54.91
50.74
57.32
2020
2021
2022
2023
Fiscal Year


Capital Intensity
3.000
2.500
2.000
1.500
1.000
0.500
0.000
Capital Intensity
2.526
1.759
1.192
1.353
2020
2021
2022
2023
Fiscal Year

Financial Ratio Analysis: Solvency

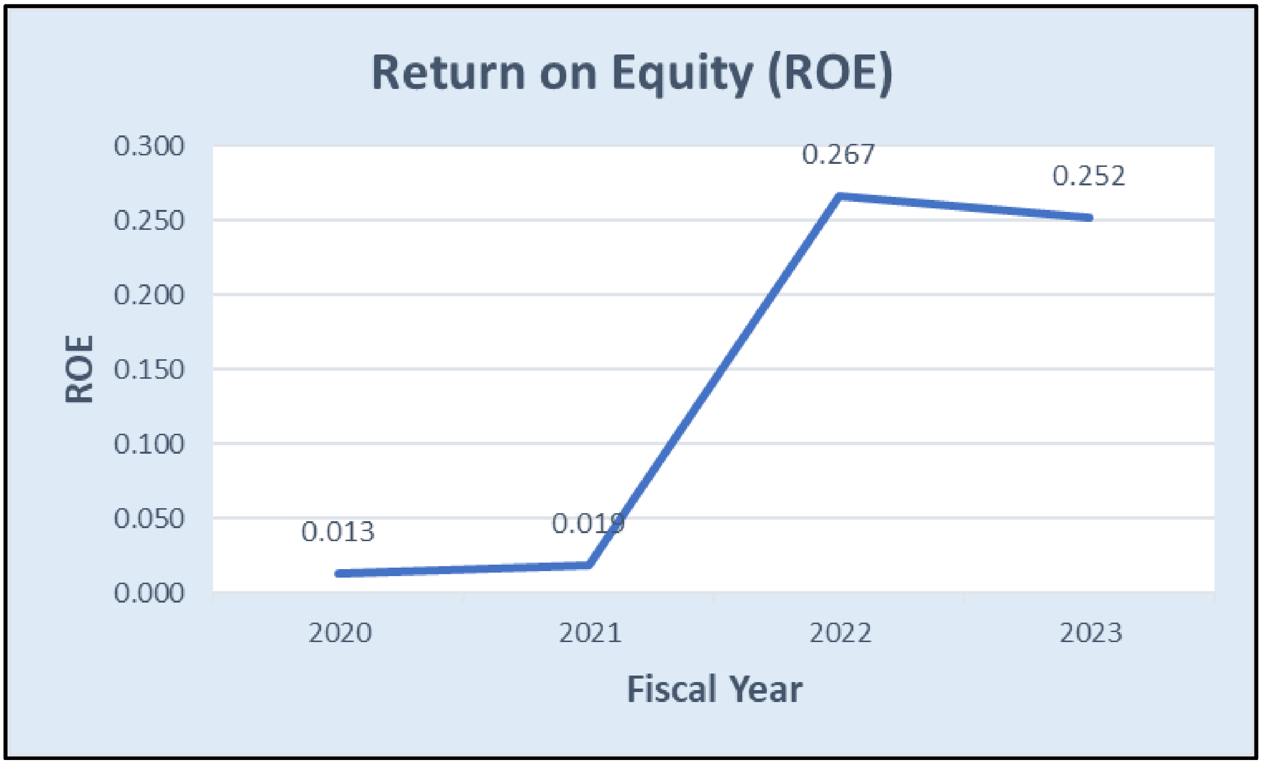


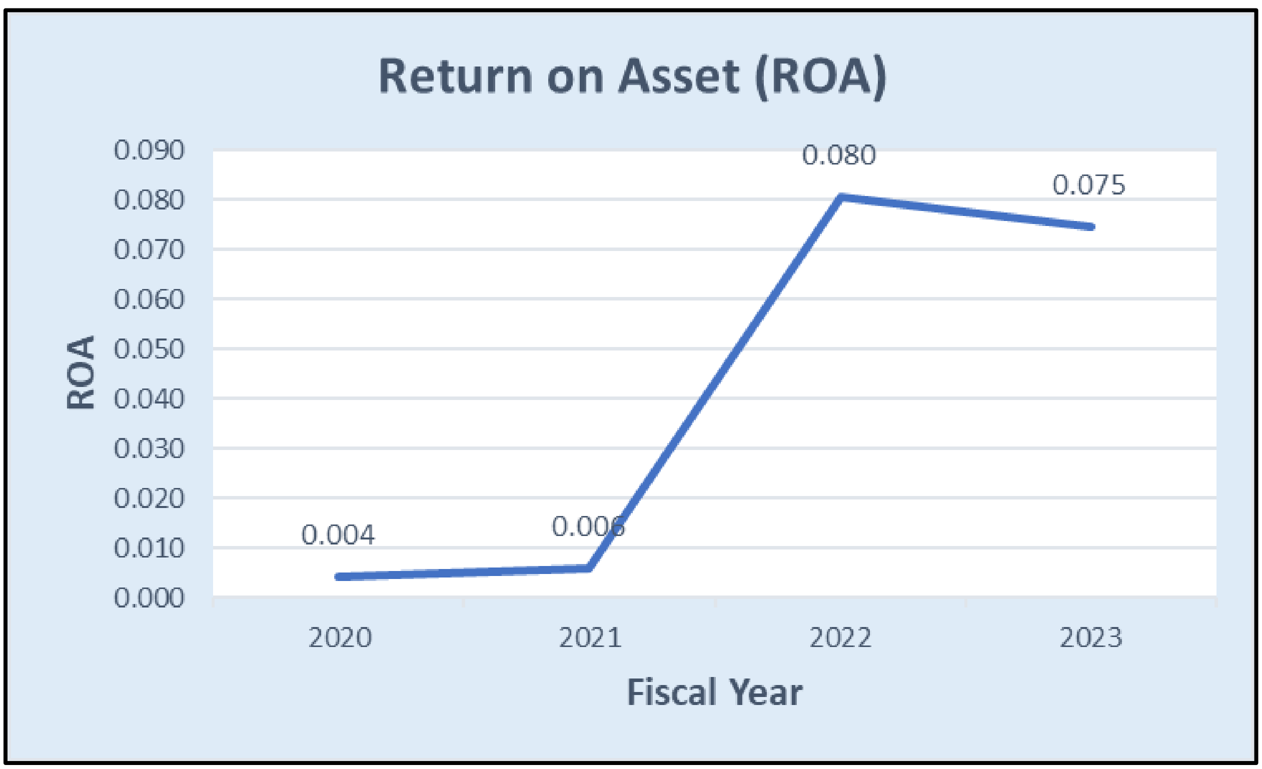


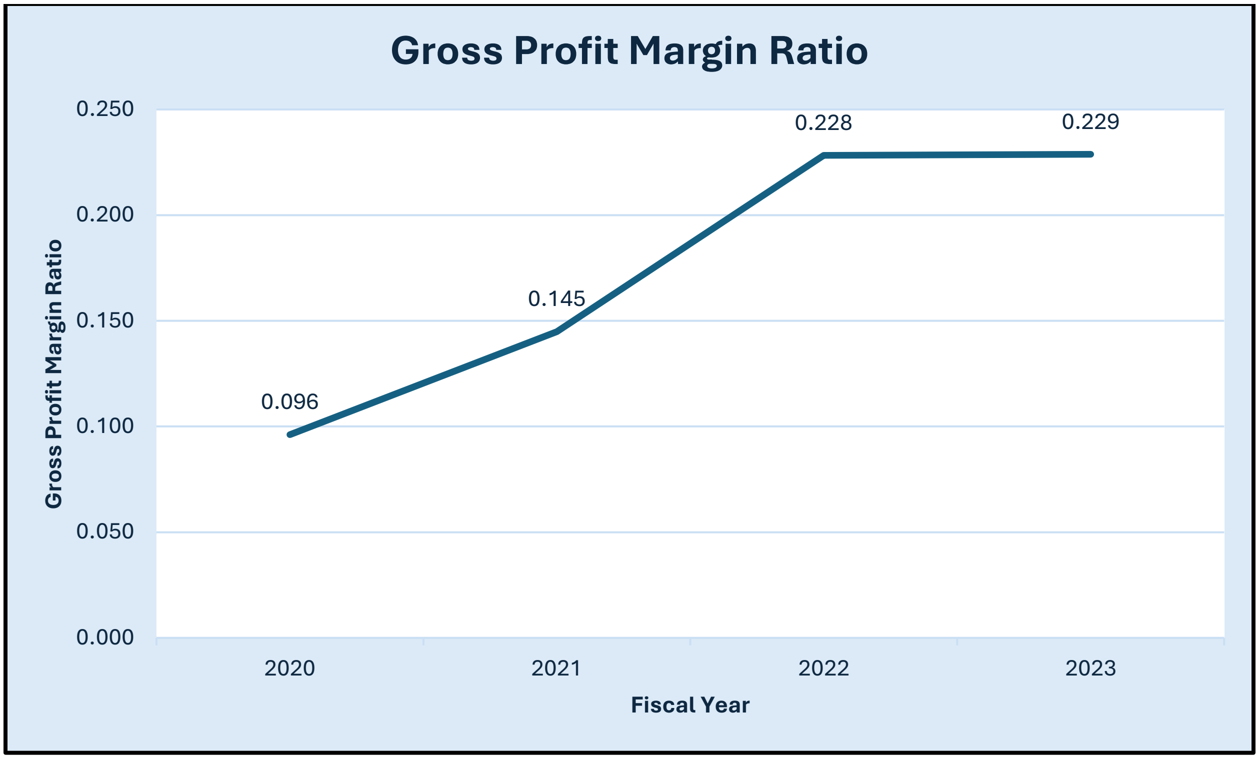


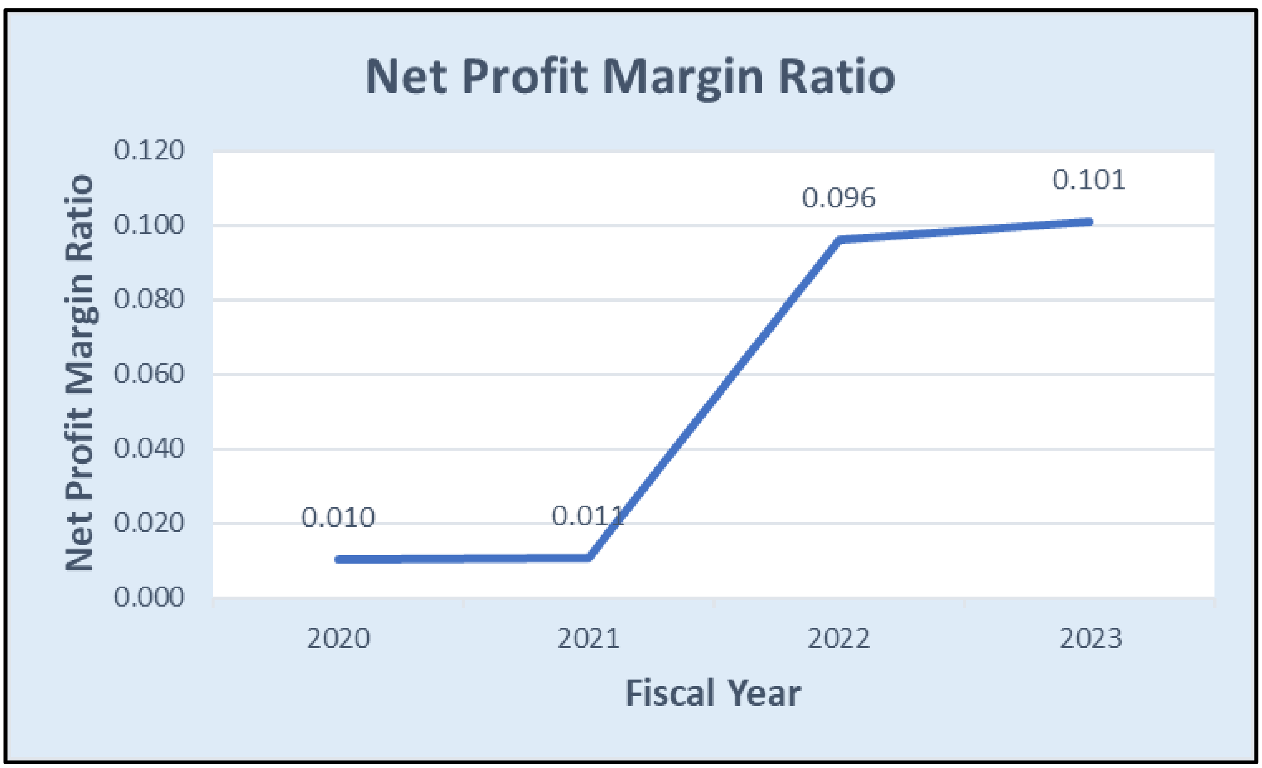
Debt-to-Equity Ratio
2.500
2.400
2.300
2.200
2.100
2.000
1.900
Debt-to-Equity Ratio
2.128
2.176
2.472
2.279
2020
2021
2022
2023
Fiscal Year

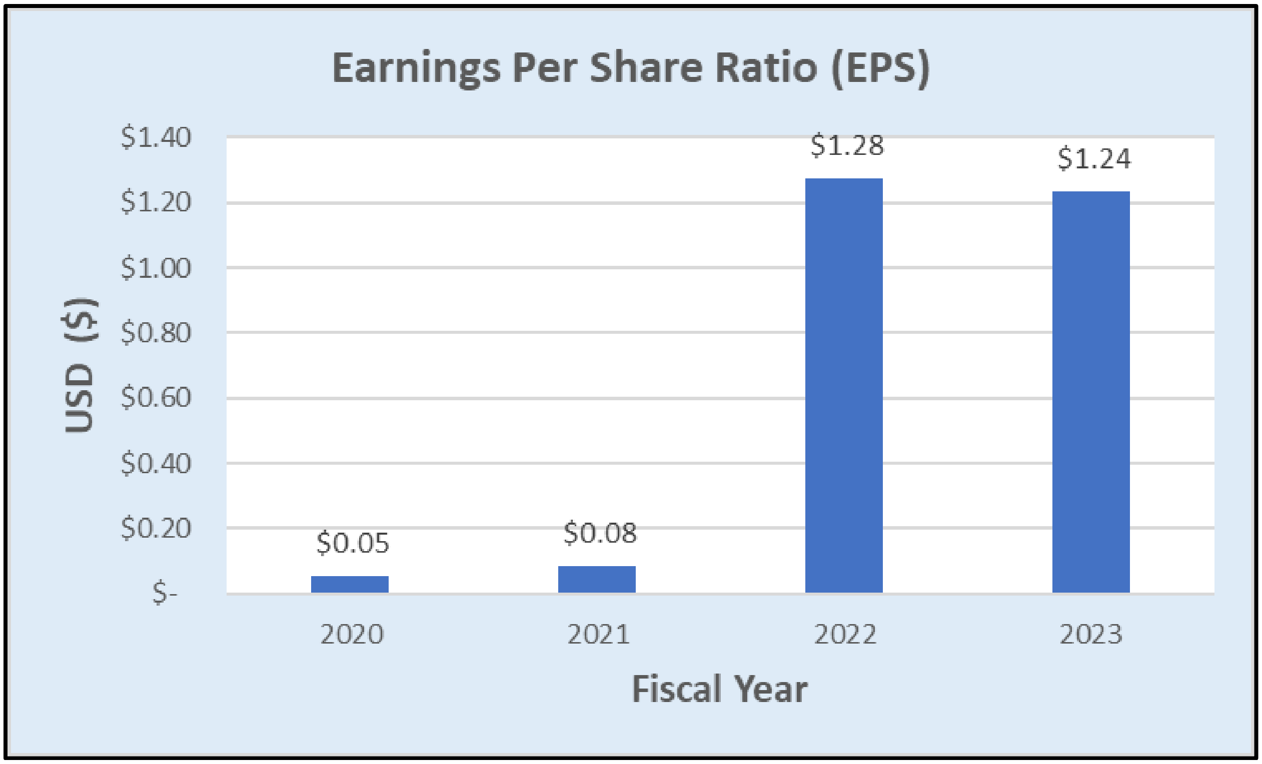
Financial Ratio Analysis: Profitability

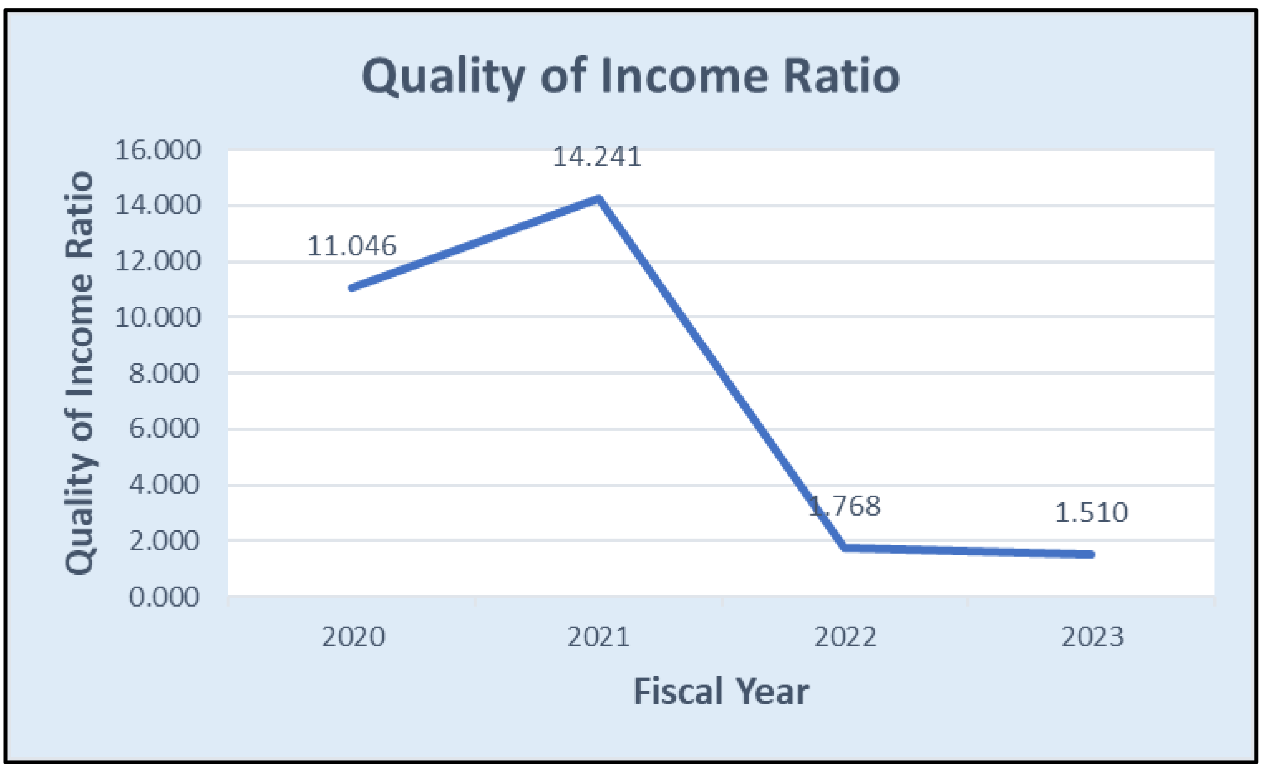


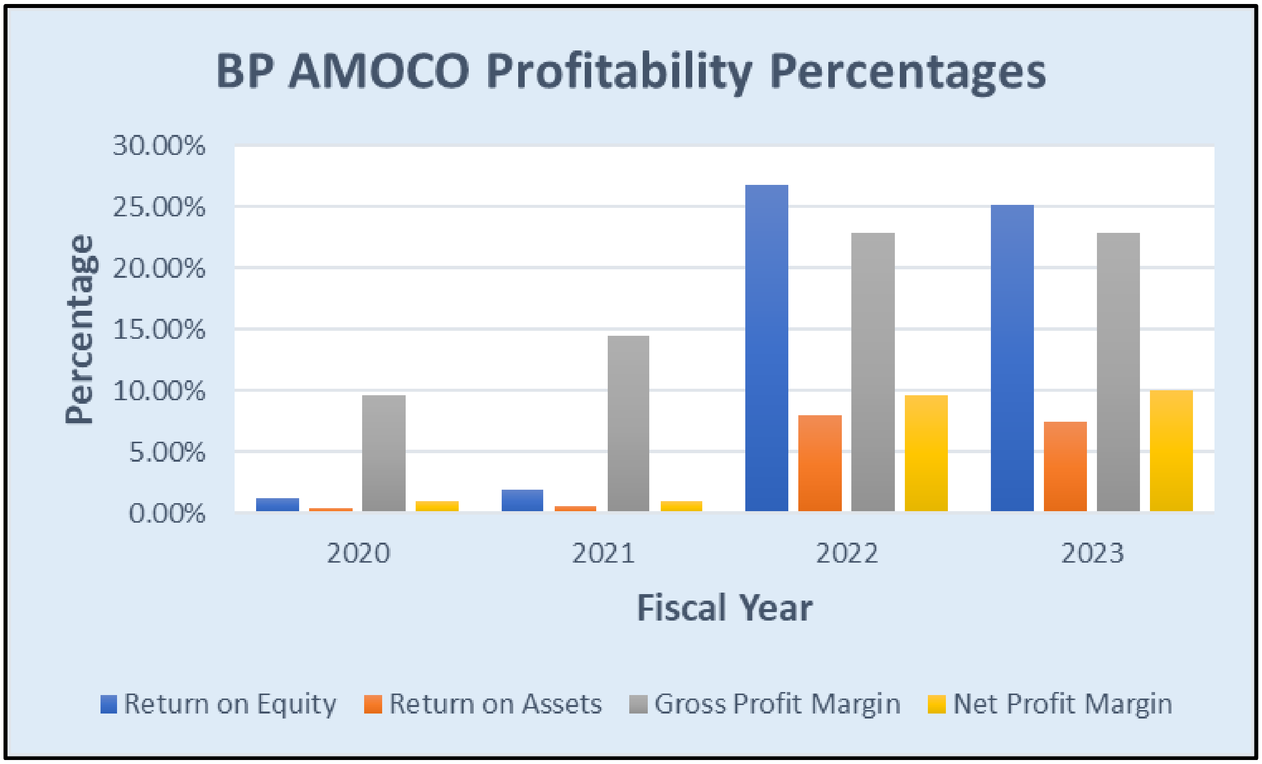



Gross Profit Margin Ratio
0.250
0.200
0.150
0.100
0.050
0.000
Gross Profit Margin Ratio
0.096
0.145
0.228
0.229
2020
2021
2022
2023
Fiscal Year

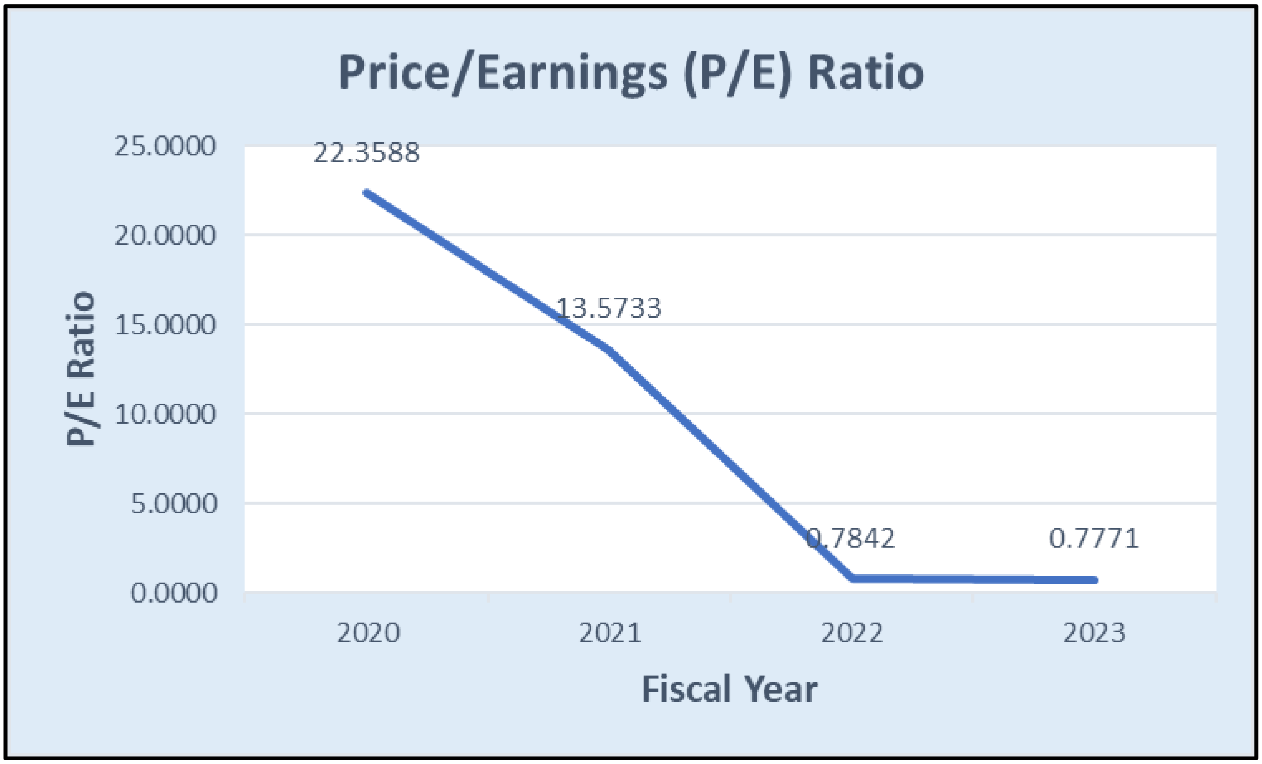

Net Profit Margin Ratio
0.120
0.100
0.080
0.060
0.040
0.020
0.000
Net Profit Margin Ratio
0.010
0.011
0.096
0.101
2020
2021
2022
2023
Fiscal Year

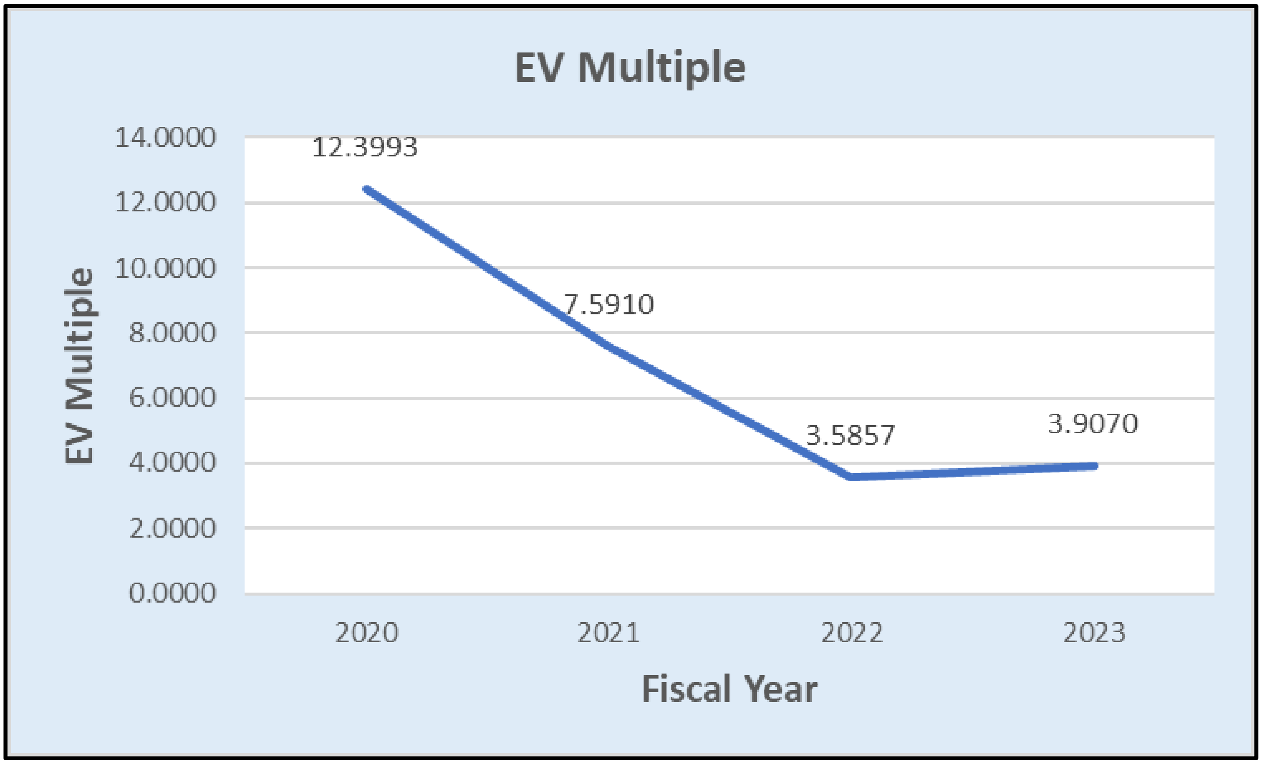

Earnings Per Share Ratio (EPS)
USD ($)
$1.40
$1.20
$1.00
$0.80
$0.60
$0.40
$0.20
$-
$0.05
$0.08
$1.28
$1.24
2020
2021
2022
2023
Fiscal Year


Quality of Income Ratio
Quality of Income Ratio
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
11.046
14.241
1.768
1.510
2020
2021
2022
2023
Fiscal Year


BP AMOCO Profitability Percentages
Percentage
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
2020
2021
2022
2023
Fiscal Year
Return on Equity
Return on Assets
Gross Profit Margin
Net Profit Margin

Financial Ratio Analysis: Market Valuation





Liquidity Ratio Analysis

- The current ratio measures BP AMOCO's ability to pay off its current liabilities with its current assets. When the ratio is above a value of 1, the firm has more current assets than its liabilities, allowing it to pay off its short-term debt with cash or liquid assets that can be converted into cash within a short period of time. From the current ratio figure, we can see that their current ratio had a decreasing trend from 2020 to 2022, dropping from 1.220 to 1.088 (a 13.2% drop). Although the value maintained a current ratio value over 1, it is concerning to see that it had a decreasing trend over multiple periods. This result is primarily responsible for the rate of increase of current liabilities to current assets, which was growing at a higher rate. In 2023, we observe some recovery, which is due to a reduction in current liabilities from 2022 to 2023 (-10.64%) compared to current assets that decreased in rate proportionally smaller to their liabilities (-0.59%).

- The decreasing trend from 2020 to 2023 was also observed in the quick ratio, which deducts inventories contribution to current assets. The drop in quick ratio from 2020 to 2022 was 13.4%, which is slightly larger than the effect observed in the current ratio. However, the increase from 2022 to 2023 increased by 15% in comparison to the current ratio, which only increased by 12.2%. This shows that cash generated from operations and assets increased more significantly during this period. When removing inventory, the firm has difficulty achieving a liquidity level capable of paying off its inventory. This shows that translating inventory is a key performance indicator for the firm's ability to maintain profitability, which will alleviate its liability requirements.

- The cash ratio was the final analysis performed for measuring BP AMOCO's liquidity and measuring its cash and cash equivalents over the current liabilities. From the provided figure, we can see that with cash alone, all 4 years are below the healthy benchmark of 0.5, which suggests that a firm should have cash cover for at least half of its current liabilities. Although cash was declining after the COVID pandemic, its recovery in 2023 may be an indication that business operations are recovering as market demands for oil and petroleum products stabilize, driving inventory to turn into cash and efficiently producing profits.

- The outlook of the company should continue to strategize on accumulating cash and other current assets to maintain a healthy level of liquidity. One advantage this can provide to the firm is the ability to have more financial ability during unexpected future events, including market volatility, transitions to renewable energy sources, global conflicts, and government regulations.

Long-Term Solvency Ratio Analysis

- The firm was able to maintain low debt during 2020 (0.680) and 2021 (0.685), which is seen in the figure displaying the total debt ratio for BP AMOCO. The increase from 2022 to 0.712 is a result of the increased rate of liability the corporation took during the year in comparison to a small increase in its total assets. In 2022, total liabilities made up 71.2% of total assets calculated from the common size vertical analysis. Although debt increased significantly during this period, current liabilities appear to contribute a significant factor to the overall effect. After 2022, the total debt ratio decreased to 0.695, with its liabilities from the previous year paid out and the increase in total assets increasing as business operations stabilized.

- The equity multiplier measures the company's extent to which it uses equity financing. From the figures produced in the analysis, the change in the equity multiplier followed similar trends observed in the firm's total debt ratio over the four periods. In 2022, we recorded a value of 3.472, presenting a shift within its equity in comparison to the previous years. During 2022, total equity decreased by -8.51%, as shown in the horizontal analysis. The total equity then increased by 5.32% from 2022 to 2023, lowering the equity multiplier by 19.3% to a value of 3.279. The recovery into 2023 indicates that BP AMOCO took measures to reduce its financial risk by balancing its long-term solvency with increasing its capital leverage in equity. The firm will also need to evaluate future returns from renewable energy assets that will be financed by debt as the market begins to shift away from non-renewable resources. Preforming a slow transition with equity and cash from operations will continue to lower the reliance on debt for financing future projects and maintain a healthy balance for its ability to cover its long-term solvency obligations.

Asset Utilization Ratio Analysis

- BP AMOCO's asset utilization during the COVID pandemic drastically reduced its operating efficiency, as seen in its ability to produce revenues from the decrease in demand for oil products from major industries that drive energy consumption, such as transportation. The economic impact is seen in the total asset turnover ratio and fixed asset turnover ratio, which compare the firm's assets to its generated sales. In 2020, the total asset turnover ratio was 0.396, meaning that the company was producing 39 cents for every dollar in assets. This impacted the corporation's operating cash flows, leading to a negative free cash flow of -144,000 for 2020. In recent years, their operational efficiency has increased, with a 44.3% rise in the total asset turnover ratio from 2020 to 2022. With the stabilization of demand among its key consumers, they were able to increase inventory sales with an inventory turnover ratio of 6.368 in 2023 from 5.675 in 2020. BP AMOCO also decreased their accounts receivable turnover ratio to 25.87 in 2023. This was an increase in comparison to previous periods, with an average of 14.11 days to collect cash. This slower rate may drive some concern about the impact on decreasing cash flow. However, increasing sales with credit is attractive to customers and may drive future profits as new accounts are created. Overall, their asset utilization appears to be increasing over time, and the transition to renewable energies will offer further opportunities to optimize the cash produced from assets.

Solvency Ratio Analysis

- The Times Interest Earned Ratio is a measure of BP AMOCO's ability to cover interest payments with income generated through its operations. The ratio in 2020 had a value of -0.231, which shows significant financial difficulties during a period with low EBIT. The firm had a great recovery into 2022 with a ratio of 27.072 and a slight dip in 2023 with a value of 15.809. This trend is parallel with the cash coverage ratio, which compares EBITDA to interest. Improvements in financial leverage were observed in the debt-to-equity ratio, with a reduction from 2022 (2.472) into 2023 (2.279). BP AMOCO's focus on increasing financing from equity and decreasing reliance on debt will help its solvency position entering 2024.

Profitability Ratio Analysis

- The profitability of BP AMOCO showed a significant increase in profitability for shareholders, as seen in the figure representing the firm's return on assets. ROE went up 24.9% from 2021 to 2022. The firm had a slight decrease in 2023 with a ROE of 0.252, which comes from the reduction of operating profits from 2022 into 2023 (-13.94%). ROA was another profitability measure that had a major increase during the same periods, with a ROA of 0.08 in 2022 and 0.075 in 2023.

- Gross profits held a consistent increase from 2020 to 2023, going up 22.9% from 9.6%. The reduction in the cost of goods sold during 2022 and maintaining strong revenue allowed the firm to maintain strong growth in their gross profit margin. The net profit margin ratio also held growth and rose to 9.6% in 2022 and 10.1% in 2023. The increase in both gross profits and net profits offered shareholders value as earnings per share rose from $0.05 in 2020 to $1.24 in 2023.

- Although the firm saw stabilization across profits into 2023, one area of concern is the quality of income ratio, which measures operating profits to net income. The quality of income dropped to 1.768 in 2022 and continued to decrease into 2023 with a value of 1.510. During this period, operational expenses and selling general and administrative expenses increased, leading to a reduction in operating profits.

Market Value Ratio Analysis

- The P/E ratio reflects the market's valuation of a company's stock relative to its earnings. BP AMOCO's P/E ratio declined from 22.36 in 2020 to 0.78 in 2022 and remained relatively low at 0.78 in 2023. This low P/E ratio could indicate that the company's stock is undervalued relative to its earnings. The market-to-book ratio also decreased during the period, from 0.29 in 2020 to 0.19 in 2023. This low ratio shows that the market value of the company's assets is lower than their book value, suggesting that the company's stock is undervalued and that investors view the assets as overvalued on the balance sheet. The company's EV multiple decreased from 12.40 in 2020 to 3.59 in 2022 and slightly increased to 3.91 in 2023. The relatively low EV multiple could indicate that the company is undervalued compared to its earnings and operational performance. This also reflects investors' concerns for future growth in the industry, with renewable energies adding another element that adds value to integrated energy corporations.

Financial Ratios Analysis for Risk

- The Financial Ratios indicate that solvency poses a potential risk to the firm's future growth. It relies heavily on debt to finance its assets which could provide less value in the future if energy demand shifts into a new market space. This is observed in the Total Debt Ratio with 2022 and 2023 yielding 0.712 and 0.695 respectively. Another marker of debt risk is seen in the Debt-to-Equity ratio, with a shift towards liabilities after recovering from the economic impact of COVID-19 pandemic. One final ratio that provides key insights into BP AMOCO's risk is the increase in the receivable turnover ratio and Day's Sales in Receivables. Increasing credit accounts may pose future risk increasing the chance of accumulating bad debt and unable to translate cash from business operations towards debt and other segments.

Valuation

Before beginning the valuation of a company, it is essential to establish the foundational assumptions that support our analysis. In conducting this valuation, we assume stable market conditions, including consistent interest rates and overall economic stability. These assumptions, combined with projecting free cash flows to the firm over the next give years with specified growth rates, will guide our assessment of the company's value under a steady market environment.

Formulas Utilized

$$PV = \frac{FV}{(1+r)^t}$$

$$\text{Overall Value} = \overbrace{[\ \text{PV1} + \text{PV2} + \text{PV3} + \text{PV4} + \text{PV5}]}^{\text{Discreet Period}} + \underbrace{[\text{PV6 - infinity}]}_{\text{Terminal Value}}$$

Calculations for Average of Previous Four Years

2023	$17,754,000,000
2022	$28,863,000,000
2021	$12,725,000,000
2020	-$144,000,000
Total	$59,198,000,000
÷	4
	$14,799,500,000.00

Present Value Calculations

$$PV_1 = \frac{14{,}799{,}500{,}000(1 + 0.05)^1}{(1 + 0.08)^1}$$

$$PV_2 = \frac{14{,}799{,}500{,}000(1 + 0.05)^2}{(1 + 0.08)^2}$$

$$PV_3 = \frac{14{,}799{,}500{,}000(1 + 0.05)^3}{(1 + 0.08)^3}$$

$$PV_4 = \frac{14{,}799{,}500{,}000(1 + 0.05)^4}{(1 + 0.08)^4}$$

$$PV_5 = \frac{14{,}799{,}500{,}000(1 + 0.05)^5}{(1 + 0.08)^5}$$

$$PV_6 = \frac{\frac{14{,}799{,}500{,}000(1 + 0.05)^6}{(0.08 - 0.03)}}{(1 + 0.08)^6}$$

Value of Company Calculation

$$\begin{aligned}
PV_1 &= 14{,}388{,}402{,}778 \\
PV_2 &= 13{,}988{,}724{,}923 \\
PV_3 &= 13{,}600{,}149{,}231 \\
PV_4 &= 13{,}222{,}367{,}307 \\
PV_5 &= \underline{12{,}855{,}079{,}327} \\
\text{Discreet Period} &= \$68{,}054{,}723{,}566 \\
PV_6 &= \underline{\underline{\$249{,}959{,}875{,}797}} \quad \text{(terminal value)} \\
& \$318{,}014{,}599{,}363
\end{aligned}$$

After calculating the average of the free cash flows to the firm from years 2020-2023, we utilized the present value (PV) formula to calculate the present values free cash flows for time periods 1-5 (the discreet period) in addition to time period 6 to infinity (terminal value). When we added the values from the discreet period with the terminal value, we concluded that the overall value of the company was $318,014,599,363.

Once the value of the company was determined, we had to calculate our offer to buy the company assuming we wanted to make $10 billion NPV. By using the NPV formula, we were able to easily plug in the numbers and solve for cost, which was $308,014,599,363

Formulas Utilized

NPV = PV - Cost

Calculations

NPV = 10,000,000,000 (given)

PV = $318,014,599,363 (solved above)

Cost = $308,014,599,363

Next, we were asked to calculate the discount rate that will return an NPV of $0 given the forecasted cash flows. This discount rate is called an internal rate of return. The general rule for using an IRR is to accept the project if the IRR is greater than the discount rate and reject the project if the IRR is less than the discount rate. In this case, the IRR = 8.65% as calculated by the Excel function =IRR

Formulas Utilized

$$NPV = C_0 + \frac{C_1}{(1+r)}$$

Calculations

$$0 = 380{,}014{,}603{,}565 + \frac{318{,}014{,}599{,}363}{(1+r)}$$

$$r = 0.032$$

$$\frac{0.032}{5\ time\ periods} = 0.0064 \text{ x } 100 = 0.64\% + 8.00\% = 8.64\%$$

If we were to move forward and acquire BP, it would likely need to be purchased by a combination of cash and debt financing. For the cash component, cash reserves or retained earnings could be used. For debt financing, we would need to borrow funds from various sources, such as banks, financial institutions, or bond markets to cover the remaining portion of the acquisition price. Debt financing can be in the form of loans, bonds, or credit.

Detailed Financial Observations & Characteristics

BP AMOCO, a global integrated oil and gas company with over $210 billion in total revenue, faced significant challenges during the COVID-19 pandemic in 2020, as evidenced by a $573 million operating profit. However, the company demonstrated remarkable resilience, with operating profit surging by 1150.92% to $10.7 billion in 2021 and net profit increasing by 812.55% in 2022, driven by a 50% increase in revenues, a 9.74% decrease in COGS, and a 26.82% reduction in operating expenses. This massive growth indicates BP AMOCO's expansive operations and market presence. The company invests heavily in property, plants, and equipment, with over $278 billion in gross PPE and $216 billion in properties, showing that it finances long-term investments in operational assets. BP AMOCO maintains a strong liquidity position, with a current ratio of 1.2, a quick ratio of 0.945, and a cash ratio of 0.332, enabling it to meet short-term obligations effectively.

The balance sheet analysis revealed strategic acquisitions totaling $4.1 billion for Archea Energy and an 82.75% increase in financial assets to $7.7 billion with its joint venture with Azule Energy in 2022. Additionally, the firm underwent debt restructuring, with an increase in current liabilities from 32.2% to 39.8% and non-current liabilities decreasing from 67.8% to 60.2%. While the current ratio improved to 1.21 in 2023, the total debt ratio increased to 0.712 in 2022 and 0.695 in 2023, and the debt-to-equity ratio increased to 2.472 in 2022, indicating higher reliance on debt financing.

The profitability analysis identified substantial increases in ROE from 0.019 in 2021 to 0.252 in 2023, gross profit margin improvement up to 22.9% in 2023, and EPS growth from $0.05 in 2020 to $1.28 in 2022. However, the quality of income ratio declined to 1.51 in 2023. Asset utilization also improved, with total asset turnover increasing from 0.396 in 2020 to 0.839 in 2022, but receivables turnover slowed to 25.87 daysever, the quality of income ratio declined to 1.51 in 2023. in 2023. An increasing receivable turnover ratio may pose future risks, as accumulating credit acounts could hinder cash flow from an increase in bad debts.

Based on the valuation of the firm, BP AMOCO is estimated to be worth $318,014,599,363. An offer to acquire the company with a $10 billion NPV would be $308,014,599,363. The internal rate of return (IRR) was 8.64%, which is higher than the assumed discount rate of 8.00%. This shows that BP AMOCO offers future value and would be an accepted project for investment. While BP AMOCO has a strong corporate size and financial position, its solvency risk and debt are areas of concern that may require strategic management and planning in the ever-changing global energy market.

An outside party looking to acquire BP AMOCO at an estimated $308 billion cost to achieve a $10 billion NPV will require careful financial strategy. The federal interest rate of 5.25%–5.50% poses a challenge for relying solely on debt financing. A more balanced approach to acquiring the firm in the current economic conditions is to utilize cash reserves and equity financing to make up a large portion of the deal. This could involve equity offerings, asset sales, or partnerships with investment firms. Moreover, the current environment in the oil and gas industry is conglomerating, with acquisitions of renewable technologies and operations becoming more popular. For the remaining acquisition cost, debt options such as bonds, loans, and securities can be utilized to provide financial leverage. Finally, a thorough evaluation of BP AMOCO's renewable energy transition is a key element in determining the future cash flows of the firm. With an assumed terminal growth rate of 3%, we are already concerned about the future risk of the investment. By maintaining financial strategy through balancing debt and equity, an outside acquirer can navigate a deal even in the current higher interest rate environment.

Overall, BP AMOCO demonstrated resilience, with an impressive financial recovery from 2020 lows. While solvency risks exist due to higher debt levels, the company's focus on cost management, operational efficiency, and strategic investments positions itself for the globally changing energy demand.

Summary Conclusion

Through a comprehensive examination of BP AMOCO's financial statements, ratios, and valuation, we gained invaluable insights into the global oil and gas industry from the perspective of a major integrated energy corporation. The analysis not only highlighted BP AMOCO's performance but also expanded upon the company's strategic acquisitions, debt restructuring, and transition towards renewable energy sources. Overall, this study underscores BP AMOCO's adaptive resilience and forward-looking strategies amidst evolving energy markets.

Through this case write-up, we were provided with a preliminary merger and acquisition view within the current state of the U.S economy. This evaluation informed us of the complexities involved in the financing field and what it takes to acquire corporations that are on a similar scale as BP AMOCO, ultimately equipping us with a holistic understanding of the dynamic behind financial strategy, operational resilience, and long-term positioning in the oil and gas industry.