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Introduction

Financial management refers to the strategic planning, organising, directing and controlling of financial undertakings in an organisation (Amihud & Mendelson, 2020). It involves applying management principles to financial resources of the organisation (Jones et al., 2022). The key objectives of financial management are profit-maximisation, wealth maximisation, efficient resource management, maintaining liquidity, cost control, financial planning and regulatory compliance (Correia, 2024). The report presents a detailed financial management analysis for Chevron Corporation, a NYSE listed company operating in the integrated energy sector. The report starts with a brief overview of the company, detailing the major events taking place in past five years, followed by a critical analysis of the company's financial performance.

Part A: Company background

Chevron Corporation is a major player in the global energy sector. Based in San Ramon, the USA, the company operates in the energy and oil and gas industry (Chevron, 2024). It serves global market. Chevron's key products include gasoline, natural gas and other petrochemicals. Currently, around 450,000 employees work in this company. The brands held by the company are Chevron, Texaco, Havoline, Caltex and Gulf (Chevron, 2024).

Over the past five years, Chevron has shown significant growth and adaptation to industry changes by focusing on sustainable energy practices and financial strength (Chevron, 2024). As of the end of 2023, Chevron reported substantial financial metrics with sales and other operating revenues reaching \$196.9 billion and total assets valued at \$261.6 billion. The company also achieved an 11.9% return on capital employed (Macrotrends, 2023). Chevron's recent years have been marked by strategic adjustments in response to evolving market demands and regulatory environments. A key area of focus has been to reducing carbon intensity in its operations to align with global shifts toward lower-carbon energy solutions (Deloitte Insights, 2023). This is evident from its venture capital investment of \$500 million in renewable energy technologies. This investment emphasises the company's commitment to diversifying its energy portfolio (Macrotrends, 2023).

However, Chevron has also been facing significant challenges in recent years. This has particularly to do with environmental and regulatory scrutiny over oil and gas operations (Deloitte Insights, 2023). The company has been actively addressing these issues by enhancing its reporting on

environmental, social, and governance (ESG) topics, aiming to provide transparency and meet increasing market-driven expectations (Jones et al., 2022). This includes efforts in carbon capture and storage, and renewable fuels in transportation, among other initiatives aimed at building a resilient lower-carbon energy system (Yazdi et al., 2022). Moreover, Chevron's strategic decisions have included exiting operations in politically sensitive areas, such as its complete withdrawal from Myanmar in response to the country's ongoing political crisis (Macrotrends, 2023). Recently, the company also had withdrawn operations from Russia due to its conflict with Ukraine. These withdrawals reflect the broader geopolitical risks that large energy corporations face, and Chevron's approach to managing its global operations amidst such challenges. Regardless, the withdrawals from any market can put serious pressure on a company's financials (Yazdi et al., 2022).

In terms of competition in the industry, Chevron remains a formidable company in the oil and gas industry, directly competing with energy giants like Saudi Aramco, PetroChina and Gazprom (Yazdi et al., 2022). These competitors challenge Chevron's position in the Middle East and Asia, pushing the company to continuously innovate and improve its operational efficiency (Deloitte Insights, 2023). The company also faces strong competition from BP, Shell and Exxon in its European operations. Chevron itself holds 12% of the market share in the integrated energy sector in terms of revenue. In the third quarter of 2023, Chevron's market share had dropped from 13.94% (Macrotrends, 2023).

On a positive note, in 2023, the company made significant investments in low-carbon technologies, thus, achieving record levels of production meeting global energy demand, while simultaneously working on reducing carbon intensity in its operations (Jones et al., 2022). In last five years, the company has also increased its dividend five times, which reflect on the company's commitment to delivering value to shareholders. This is part of Chevron's broader strategy to expand its traditional oil and gas operations and to invest in renewable energy solutions such as hydrogen and carbon capture (Deloitte Insights, 2023).

Part B: Financial Analysis

The five-year financial statements of Chevron reflect the current financial performance of the company. It can be seen that Chevron's revenue fluctuated in last five years, with a noticeable

decline in 2020, likely due to the impact of the COVID-19 pandemic on global economic activity and oil prices (Macrotrends, 2023). The revenue recovered significantly in 2022, peaking at \$246,252 million before another decline to \$200,949 million in 2023, which is indicative of volatile market conditions or strategic business changes (Macrotrends, 2023). However, despite the fluctuations, there has been a general upward trend in operating income from 2018 to 2022, followed by a significant drop in 2023 to \$29,584 million, which suggests that the company had lower operational efficiency or higher operational costs relative to revenue in the last year. The sharp decline in net income from \$35,465 million in 2022 to \$21,369 million in 2023 is also noteworthy (Macrotrends, 2023).

Upon analysing the balance sheet, a significant decline in total current assets from \$50,343 million in 2022 to \$41,128 million in 2023 can be observed, which can impact Chevron's short-term liquidity, potentially affecting its ability to cover immediate obligations (Macrotrends, 2023). Furthermore, the overall growth in total assets from \$237,428 million in 2019 to \$261,632 million in 2023 suggests Chevron is expanding its asset base, which can be something positive if these assets are effectively generating returns (Deloitte Insights, 2023). Chevron's total liabilities increased from 2019 to 2020, followed by critical fluctuations and a drop from \$97,467 million in 2022 to \$67,445 million in 2023 in total long-term liabilities, potentially due to debt repayment. In brief, the analysis of the balance sheet suggests that Chevron has been actively managing its assets and liabilities, with increased investments and a strong equity base (Macrotrends, 2023). However, decreased cash and comprehensive income in 2023 may require the company to pay attention to understanding the underlying factors, such as market conditions, operational challenges or strategic initiatives that may have influenced these figures (Deloitte Insights, 2023).

Calculation of financial ratios

Profitability ratio: Profitability ratios measure the ability of a company to generate earnings relative to its revenue, operational costs, equity and other financial metrics (Correia, 2024). They indicate how effectively a company generates profits from its operations. Gross profit margin, net profit margin and return on equity are some profitability ratios (Jones et al., 2022).

Gross Profit Margin reflects the proportion of money left over from the revenues after taking account for the cost of goods sold (COGS) (Correia, 2024). Net profit margin is another profitability ratio that shows the percentage of revenue that has turned into profits after all expenses

have been deducted. Return on Equity (ROE) measures the profitability of a company by revealing how much profit a company generates with the money that shareholders have invested (Jones et al., 2022).

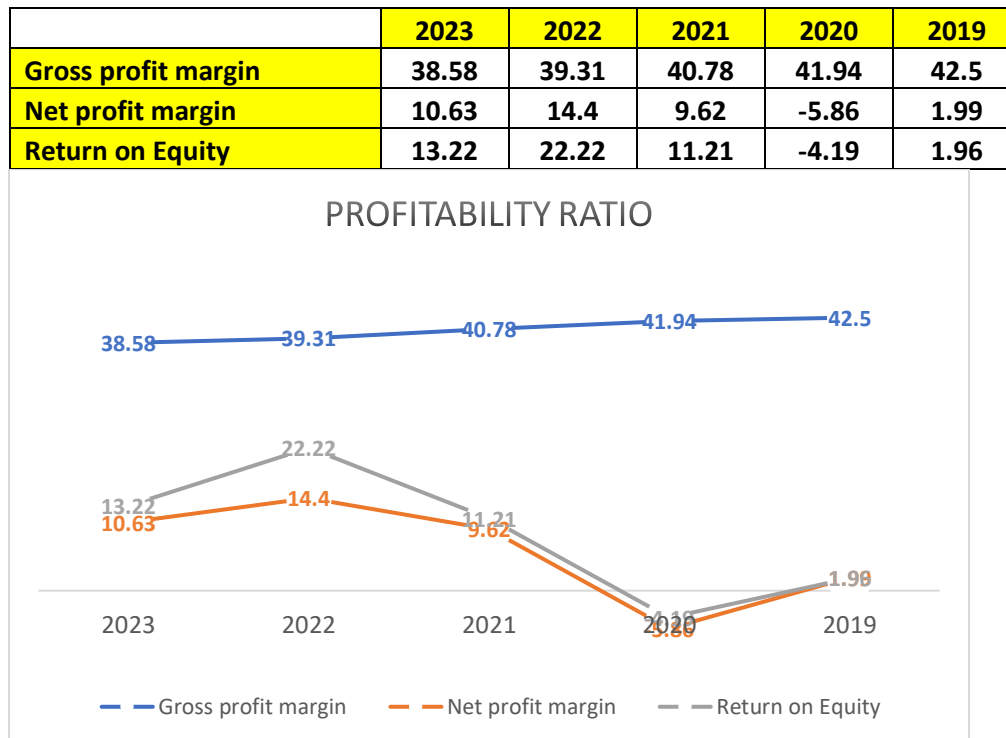


Figure: Profitability ratio (Chevron, 2024)

Starting with the company's gross profit margin, a gradual decline from 42.5% in 2019 to 38.58% in 2023 can be observed. This reduction indicates an increase in the cost of goods sold or a decrease in revenue, possibly due to fluctuating oil prices, increased competition and even higher operational costs (Chevron, 2024). The figure reflects a tightening of the core operational efficiency of the company. (Oshilalu, 2021)

The analysis of the net profit margin shows greater volatility as it drops to the negative figure in 2020 with a value of -5.86% (Chevron, 2024). This suggests that the company has incurred more expenses than revenue during that year, which can be attributed to the impact of the COVID-19 pandemic during that year (Chevron, 2024). The subsequent recovery to 9.62% in 2021 and 14.4% in 2022 indicated a successful turnaround, as the company's financial statement indicates cost-cutting measures, and the market data indicates improved market conditions (Oshilalu, 2021).

Lately the decrease to 10.63% in 2023 again requires attention to determine the causes of the poor performance (Chevron, 2024).

Lastly, ROE is an important indicator of profitability, which provides insight into the company's profitability from the shareholders' perspective. An ROE of 22.22% in the year 2022 showed a strong return, which then fell to 13.22% in 2023. The high ROE in 2022 was due to effective cost management as well as strong revenue growth. The decline in 2023 on the other hand, raised concerns about the company's ability to sustain its profitability (Chevron, 2024).

Liquidity ratio: Liquidity ratio helps assess the ability of a company to pay off its short-term liabilities with its short-term assets, which is crucial to avoid financial difficulties and to smoothly maintain current operations (Pandey, 2021). Two of the commonly used liquidity ratios are current ratio and quick ratio (Paramasivan & Subramanian, 2009). Current ratio indicates whether a company can pay off its short-term liabilities with its short-term assets. Quick ratio measures the ability of the company to meet the short-term obligations with the most liquid assets (Pandey, 2021).

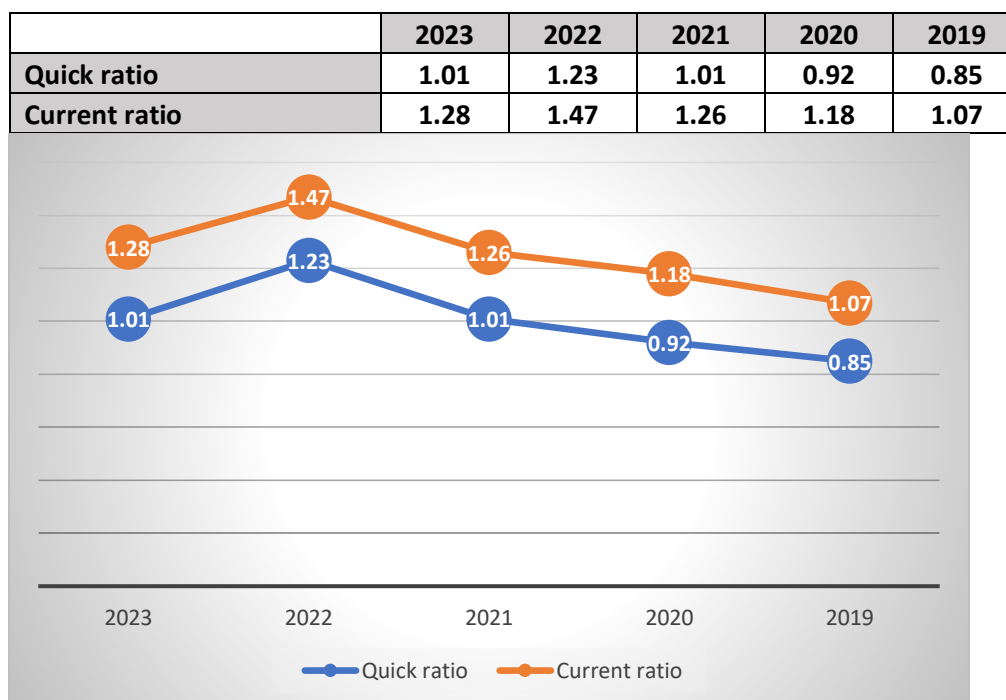


Figure: Liquidity ratio (Chevron, 2024)

The quick ratio has seemingly changed for the company over the last five years, with a notable decline in 2019 and 2020, reaching 0.85 and 0.92 respectively. This could indicate less coverage for immediate liabilities (Chevron, 2024). However, the ratios improved significantly since 2021, signalling a better position to cover short-term obligations without relying on the sale of inventory. The ratio has recently declined again to 1.01 in 2023, reflecting a tighter liquidity situation compared to before (Chevron, 2024). However, the company still maintains just enough liquid assets to cover liabilities.

The current ratio of the company shows a similar trend, with a consistent improvement from 2019 to 2022, moving from 1.07 to a more comfortable 1.47. This indicated an improvement in the company's short-term financial stability. The decrease to 1.28 in 2023, while still above the 1:1 benchmark, signified decreased current assets as evident from the balance sheet. This hints at potential short-term financial pressure (Chevron, 2024).

Gearing Ratios: Gearing ratios help determine the extent to which a business is financed by debt capital compared to the owned funds (Paramasivan & Subramanian, 2009). Higher gearing ratio can affect a company's stability and risk profile. One of the gearing ratios is the debt-to-equity ratio, which compares the total liabilities to shareholders' equity reflecting the proportion of equity and debt used to finance the company's assets (Pandey, 2021). Another gearing ratio that is commonly used is the debt ratio. It shows the proportion of a company's assets that are financed by debt (Paramasivan & Subramanian, 2009).

	2023	2022	2021	2020	2019
Debt-to-equity ratio	0.13	0.15	0.23	0.33	0.19
Debt ratio	0.11	0.117	0.18	0.24	0.14

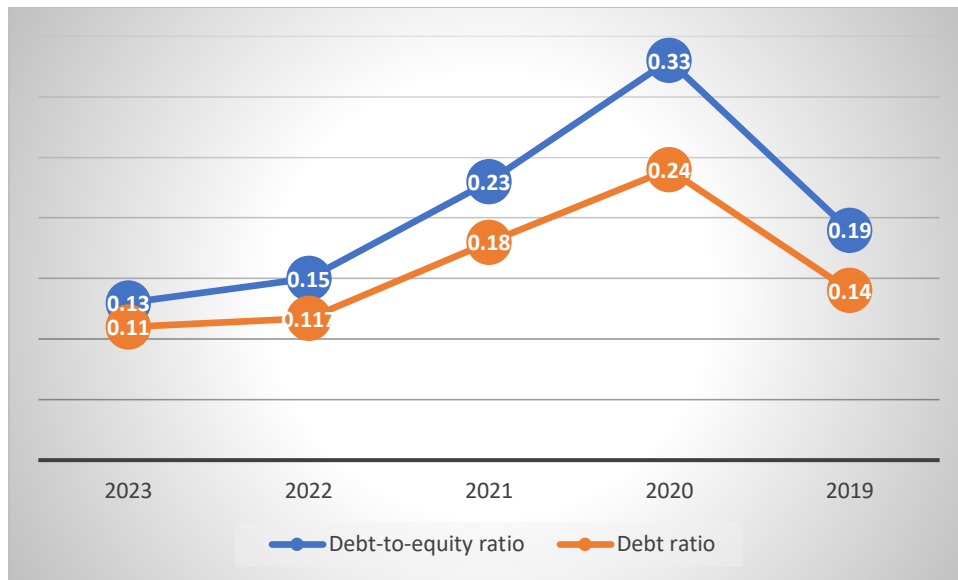


Figure: Gearing ratio

The Debt-to-Equity Ratio shows a decrease from 0.33 in 2020 to 0.13 in 2023. This indicates that Chevron has been reducing its reliance on debt financing relative to its equity. A high ratio in 2020 reflects an increased borrowing during the economic challenges posed by the pandemic (Macrotrends, 2023). The subsequent decrease suggest that the company has been increasing its equity base, which could be a sign of a deliberate strategy to strengthen its balance sheet and reduce financial risk (Oshilalu, 2021).

Similarly, the Debt Ratio shows the proportion of assets financed by debt which has decreased from 0.24 in 2020 to 0.11 in 2023 (Macrotrends, 2023). This trend further supports the view that the company has been lowering its overall debt levels relative to its assets. The downward trend in both ratios suggests a conservative approach to leverage, which can be beneficial in terms of financial stability and also reduce its cost of capital (Oshilalu, 2021). However, it may also imply that Chevron is potentially under-leveraging.

Efficiency Ratios: Efficiency ratios are measures of how well a company uses its assets and liabilities internally to generate income and maximize operational performance (Pandey, 2021). Asset turnover ratio, inventory turnover ratio and receivables turnover ratio are commonly used efficiency ratios. Asset turnover ratio indicates how efficiently a company can use its assets to generate sales (Jones et al., 2022). Inventory turnover ratio shows how many times a company's inventory is sold and replaced over a period. Lastly, receivables turnover ratio measures how

efficiently a firm uses its assets by determining how often trade receivables are collected during a year (Pandey, 2021).

	2023	2022	2021	2020	2019
Asset Turnover Ratio	0.77	0.96	0.68	0.39	0.62
Inventory Turnover Ratio	14.33	18.12	14.16	9.69	14.41
Receivables Turnover Ratio	10.09	12.03	8.83	8.26	10.99

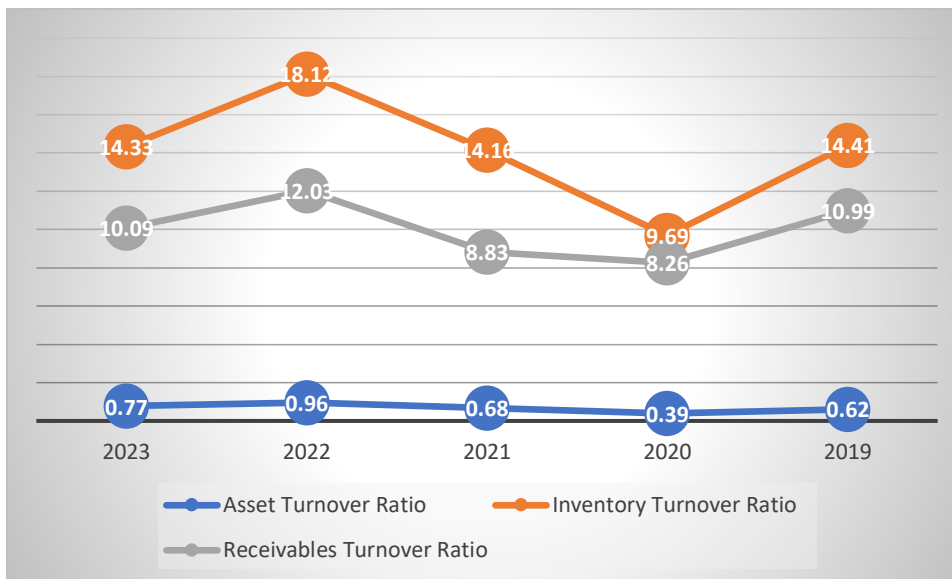


Figure: Efficiency ratio (Macrotrends, 2023)

Looking at the Asset Turnover Ratio, fluctuating trend can be observed over the five-year period. A low of 0.39 in 2020 was possibly due to decreased demand and operational challenges during the pandemic, which improved significantly to 0.96 in 2022 before declining to 0.77 in 2023 (Macrotrends, 2023). The ratio suggests that Chevron was more effective at using its assets to generate revenue in 2022, but this efficiency has slightly decreased in 2023 (Fitch Ratings, 2024). The decline in the ratio can be attributed to lower sales, increased asset base without a proportionate increase in sales or other operational inefficiencies (Macrotrends, 2023).

The Inventory Turnover Ratio shows the frequency of Chevron's inventory being sold and replaced. A peak at 18.12 in 2022 indicates a period of high sales volume relative to inventory, suggesting strong market demand and efficient inventory management (Chevron, 2024). However, the decline to 14.33 in 2023 implies slower sales and increased inventory levels. It could also indicate a strategic buildup of inventory in anticipation of future sales (Fitch Ratings, 2024).

Lastly, the Receivables Turnover Ratio has seen an overall decrease from 10.99 in 2019 to 10.09 in 2023, with a peak at 12.03 in 2022. This ratio indicates how effectively the company has been managing its credit policies and collecting debts (Fitch Ratings, 2024). The recent reduction decline in the ratio, however, points to a lengthening of the credit terms or slower collection processes, which could potentially tie up funds that could otherwise be used for operations or investments (Chevron, 2024).

Critical evaluation

Upon evaluating the profitability ratios, it is evident that the company has been facing some pressure to its core operations due to the rising costs of operation (Correia, 2024). The net profit margin on the other hand, shows signs of resilience and ability of the company to adapt to critical situations (Fidler, 2023). However, the fluctuations in ROE could indicate questions about sustainability of returns to shareholders. The liquidity ratio analysis shows the company's ability to pay off its current liabilities with its short-term assets (Jones et al., 2022). The downward trend in both the debt-to-equity and debt ratios sign reduced leverage and improved financial stability. The company's conservative capital structure could position it well in times of volatility. However, an overly cautious approach that could limit growth opportunities for the company (Oshilalu, 2021). Lastly, the efficiency ratios imply underutilisation of assets, and the lowered inventory turnover ratio suggests inventory management issues (Paramasivan & Subramanian, 2009). To summarise the performance of the company, it is safe to say that Chevron has demonstrated financial resilience and the capacity for recovery, as seen post-2020. However, the 2023 ratios point to potential areas of concern in profitability, liquidity, and efficiency that it needs to address. Market conditions, strategic decisions regarding investments and operational efficiencies will be critical in shaping the company's future performance (Correia, 2024).

Comparison

One of the core competitors of Chevron Corporation is Exxon Mobil Corporation. It is one of the largest publicly traded oil and gas companies based in Texas, USA. It is involved in virtually every aspect of the energy and petrochemical industries (Oshilalu, 2021). ExxonMobil is also known for its technological innovations in the energy sector, as it invests heavily in research and development to improve resource extraction and efficiency and to develop new energy sources (Fitch Ratings, 2024). Its market presence extends into the production of natural gas, crude oil and also

petrochemical products, with significant refineries and chemical plants located around the world (Macrotrends, 2023).

Another major competitor of Chevron would be Royal Dutch Shell (now Shell Plc). The company also operates in the integrated energy industry and maintains the position in the sector as one of the largest oil and gas companies in the world (Fitch Ratings, 2024). It operates in 70 countries and employs 103000 employees in its global operations. In 2021, the company changed its name to Shell Plc (Macrotrends, 2023).

Similar to Chevron, Exxon Mobil and Royal Dutch have also been making major investments in renewable energy sector. Their financial performances are closely tied to global commodity prices and are subjected to the cyclicity of the energy market (Fitch Ratings, 2024). The companies are also constituents of the Dow Jones Industrial Average and have reputation for delivering robust shareholder returns, including a history of consistent dividends (Macrotrends, 2023).

The 2023 financial ratios of the company:

	Exxon	Chevron	Shell
	2023	2023	2023
Gross profit margin	24.86%	38.58	25.78%
Net profit margin	10.45%	10.63	5.99%
Return on Equity	17.58%	13.22	10.42%
Quick ratio	1.07	1.01	1.09
Current ratio	1.4791	1.28	1.4048
Debt-to-equity ratio	0.1956	0.13	0.4329
Debt ratio	1.07	0.11	0.2755
Asset Turnover Ratio	0.9157	0.77	0.7955
Inventory Turnover Ratio	10.3075	14.33	9.219
Receivables Turnover Ratio	8.64	10.09	6.066

Table: Financial ratios of Exxon Mobil and Shell compared with Chevron Corporation (Macrotrends, 2023)

Upon comparing the financial ratios of these two energy giants, it is evident that Chevron has a significantly higher gross profit margin than Exxon at 38.58%; compared to Exxon's 24.86%. This gap suggests that Chevron has been more effective at controlling its cost of goods sold and/or has

been able to command higher prices for its products relative to its costs (Yazdi et al., 2022). However, the net profit margins can be seen to be quite close, with Chevron slightly outperforming Exxon, with 10.63% to 10.45%. This indicates that while Chevron generates more profit from its core operations, Exxon might be managing its operating expenses, interest and taxes more efficiently (Oshilalu, 2021).

When considering the liquidity ratios, Exxon's current ratio is superior to Chevron's, indicating that Exxon has a better short-term financial health, with more assets relative to its liabilities to cover its short-term obligations (Fitch Ratings, 2024). The quick ratio is also slightly higher for Exxon than for Chevron, suggesting that Exxon is in a marginally better position to fulfil its immediate obligations without needing to sell inventory (Yazdi et al., 2022).

The gearing ratios reveal that Chevron has been operating with less leverage, having a lower debt-to-equity ratio when compared to Exxon's ratio. This could imply a more conservative approach to financing and potentially a lower risk profile (Oshilalu, 2021). Chevron's debt ratio also indicates that a lower percentage of its assets are financed through debt compared to Exxon, which suggests a stronger equity base relative to debt. In terms of efficiency, the asset turnover ratio shows that Exxon is more effective in using its assets to generate revenue if compared with Chevron (Fitch Ratings, 2024). However, Chevron shows a higher inventory turnover ratio compared to Exxon, indicating that Chevron cycles through its inventory more quickly, indicating greater efficiency in inventory management (Yazdi et al., 2022).

Overall, Chevron shows a greater ability to generate profit from its sales and manage inventory and receivables efficiently, whereas Exxon demonstrates stronger liquidity and asset utilisation (Antill & Arnott, 2023). The lower leverage at Chevron suggests a more conservative approach to financing, which could be seen as a safer financial strategy in a volatile industry. On the other hand, Exxon's better liquidity ratios could position it well to handle short-term market fluctuations or take advantage of emerging opportunities (Antill & Arnott, 2023).

If compared with Shell, Chevron's gross profit margin, net profit margin and ROE are all significantly higher than Shell's (Antill & Arnott, 2023). These indicate that Chevron has been more effective at controlling the costs of goods sold, more efficient in managing its expenses and operations to retain more on each dollar of sales, and to generate profits from its shareholders' equity (Fitch Ratings, 2024). But looking at Shell's liquidity ratio, it has a better short-term

liquidity position. In terms of leverage ratios, Chevron outperforms Shell on all accounts, and Chevron also has greater efficiency ratios compared to Shell. Overall, these financial ratios portray Chevron as having higher profitability margins, being more efficient with its inventory management and less leveraged in terms of debt relative to Shell. On the other hand, Shell demonstrates slightly better liquidity (Antill & Arnott, 2023).

Thus, compared to the major competitors in the industry, Chevron has been performing better in terms of financial performance in most aspects. This indicates that Chevron could be positioned better and has greater financial resilience in the industry, than its competitors.

Recommendations on improving the financial management

Upon analysing the company's current financial performance, several practical and timely recommendations can be made. First of all, the company's decreasing gross profit margin suggests that there is a need to control costs more tightly, and the company should also evaluate its supply chain and operational efficiencies to identify areas, where costs can be reduced without compromising on the operational and product quality and safety (Antill & Arnott, 2023). Additionally, Chevron could explore increasing its product prices, where market conditions allow, to improve margins without losing competitive positioning (Jones et al., 2022). Secondly, Chevron should consider improving its liquidity performance by optimising working capital management, such as reducing days sales outstanding (DSO) to enhance cash flow. The company should negotiate better payment terms with suppliers or alternate inventory methods to free up cash (Fidler, 2023). Thirdly, while Chevron's lower debt-to-equity ratio is commendable; it must ensure that this conventional approach does not limit growth opportunities. Chevron should continuously review its capital structure to find an optimal balance between debt and equity, taking advantage of low-interest rates to finance investments that could yield higher returns (Antill & Arnott, 2023).

It is recommended that Chevron should continue to invest in research and development to improve operational efficiencies and develop new products (Correia, 2024). This can help with cost savings in the long run and open up new revenue streams, particularly in renewable energy sectors. It is also necessary for the company to implement a robust financial performance monitoring system to keep track of these ratios in real-time and adjust strategies promptly in response to market changes or internal performance issues (Fidler, 2023). Last but not least, Chevron should maintain

transparent communication with stakeholders regarding its financial health and strategic direction to strengthen investor confidence and ensure support for its financial strategies.

Part C: Capital budgeting decision

A. PP, NPV and ARR calculation

Payback period calculation

The Payback Period is the time it takes for a project to repay its initial investment.

$$PBP = t + \left(\frac{|\text{Cumulative Cash Flow at } t-1|}{\text{Cash Flow at } t} \right)$$

Where:

- t is the last time period with a cumulative cash flow that is negative.

For Project A: the initial investment is -£5000m

To calculate the PP, the cumulative cash flows each year are as following;

- Year 1: -£5000 + £2500 = -£2500m
- Year 2: -£2500 + £2000 = -£500m
- Year 3: -£500 + £1000 = £500m

Thus, the investment will be paid back sometime in Year 3

Hence, PP for Project A = 2 + 0.5 = 2.5 years.

For Project B, the initial investment is -£1000m

The cumulative cash flows each year are

Year 1: -£1000 + £1500 = £500m

It is evident that the investment can be paid back in Year 1.

Hence, PP for Project B = 0.67 years.

In terms of Payback period calculation, it is evident that Project B would be a preferable alternative. If earlier return is the priority, than Project B is the option to go for.

Accounting Rate of Return calculation

ARR is the average annual profit of the project divided by the initial investment.

$$ARR = \frac{\text{Average Annual Profit}}{\text{Initial Investment}} \times 100\%$$

For Project A:

- The sum of the cash flows over the years = $-\text{£}5000 + \text{£}2500 + \text{£}2000 + \text{£}1000 - \text{£}442 = \text{£}58\text{m}$
- The average annual profit over 4 years = $\text{£}58\text{m} / 4 = \text{£}14.5\text{m}$
- $ARR = (\text{£}14.5\text{m} / \text{£}5000\text{m}) * 100 = 0.29\%$

For Project B:

- The sum of the cash flows over the years = $-\text{£}1000 + \text{£}1500 + \text{£}1000 + \text{£}1000 - \text{£}470 = \text{£}2030\text{m}$
- The average annual profit over 4 years = $\text{£}2030\text{m} / 4 = \text{£}507.5\text{m}$
- $ARR = (\text{£}507.5\text{m} / \text{£}1000\text{m}) * 100 = 50.75\%$

It is evident here that Project B has a significantly higher ARR of 50.75% compared to Project A's ARR of 0.29%. A higher ARR here implies that the project is generating more profit relative to its cost. In this case, Project B ARR indicates that for every dollar invested, the project is generating about 51 cents of profit annually, which is substantially more efficient compared to Project A that is generating less than 1 cent. This considerable difference suggests that Project B is likely to be a much better investment from a profitability standpoint, when considering the ARR value alone. It is to note that ARR does not account for the time value of money or cash flow timing, and should be considered alongside other financial metrics such as NPV and IRR for a comprehensive evaluation.

Net Present Value calculation

The NPV is calculated by discounting both cash inflows and outflows to their present value and then summing those values. The formula for NPV is as following;

$$NPV = \sum_{t=0}^T \frac{C_t}{(1+r)^t}$$

Where:

- C_t is the net cash flow at time t ,
- r is the discount rate (cost of capital),
- t is the time period in years,
- T is the total number of periods.

	A	B
Year 0	-5000	-1000
Year 1	2481.38958	1488.83
Year 2	1970.33	985.17
Year 3	977.83	977.83
Year 4	-428.98	-456.16
	\$572.12m	\$1,995.67m

Project A has a positive NPV of \$572.12m, which means that the present value of future cash inflows from the project exceeds the initial investment, and is expected to add value to the company and generate a return that is higher than the company's cost of capital. Project B on the other hand, shows a much higher NPV of \$1,995.67m, greater than that of Project A. This suggests that not only does Project B cover the initial investment and the cost of capital, but it also provides a significantly larger margin of value creation for the company. Project B is expected to generate a return much greater than the company's cost of capital and is therefore a more attractive investment based on NPV.

The initial investments for each project increase by 10%, and all cash flows fall by 10%

The modified cash flow figures are as following;

Project A

- Year 0: -5500
- Year 1: 2250
- Year 2: 1800
- Year 3: 900
- Year 4: -397.8

Project B

- Year 0: -1100
- Year 1: 1350
- Year 2: 900
- Year 3: 900
- Year 4: -423

The company's cost of capital is currently at 0.75 per cent.

$$NPV_A = -5500/(1+0.0075)^0 + 2250/(1+0.0075)^1 + 1800/(1+0.0075)^2 + 900/(1+0.0075)^3 + -397.8/(1+0.0075)^4$$

$$= -999.49$$

$$NPV_B = -1100/(1+0.0075)^0 + 1350/(1+0.0075)^1 + 900/(1+0.0075)^2 + 900/(1+0.0075)^3 + -423/(1+0.0075)^4$$

$$= 1596.11$$

Based on the NPV calculation, Project B is still the better choice because it has a higher (and positive) NPV, suggesting it is expected to add more value to the firm than Project A.

The advantages and shortcomings of the PBP, ARR and NPV techniques

PP: The advantages of Payback Period would be its simplicity when it comes to calculation and understanding the figures. Thus, it is more accessible to a wide range of users. Furthermore, it helps assess the time it takes for an investment to become liquid again, which is particularly useful for businesses that prioritise quick recovery of cash. However, PP ignores the time value of money,

which means that future cash flows are not discounted, leading to skewed evaluations in terms of profitability (Jones et al., 2022).

ARR: The advantage of ARR is that it uses accounting profits rather than cash flows, which integrates well with other financial performance metrics. It is also simple to calculate and interpret, providing a clear percentage return. However, it also ignores the time value of money, which can result in misleading decision-making for long-term projects (Pandey, 2021).

NPV: The advantage of NPV is that it takes into account all cash flows and the time value of money, thus, providing a thorough assessment of the profitability of the project. Furthermore, it discounts future cash flows, thus, allowing for a risk assessment of future cash flows. However, it can be complex to calculate, requiring accurate estimation of the cost of capital and future cash flows, which can be uncertain (Yazdi et al., 2022).

Non-financial factors management

When evaluating the acceptability of capital projects, the management of the company must also consider a range of non-financial factors that are linked to the success and suitability of a project (Jones et al., 2022). For instance, a company must consider the strategic alignment of the project with the company's core strategies, such as the objectives for expanding market share, or achieving long term growth (Correia, 2024). The company must also consider the effect of the project on the current operations. The project should be assessed based on its potential to disrupt or improve existing processes, the need for new technology or training and its integration into current practices. The regulatory environment is another issue that needs to be considered (Amihud & Mendelson, 2020). Management must consider that compliance with regulations and potential changes in legal requirements can affect the viability of a project. This includes changes in environmental regulations, health and safety standards, labour laws and industry-specific regulations (Jones et al., 2022).

The management should consider and evaluate the sustainability and CSR aspects in making project decisions. Projects should align with environmental goals and socially responsible business practices. Companies that prioritize sustainable practices and CSR can influence customer perception and long-term viability (Pandey, 2021).

Human resource considerations are necessary as well, since the employees are the ones who can make projects successful or may act as barriers to effective completion of projects in fear of changes. Therefore, the need for new skills, additional workforce or retraining programs should be factored into the decision-making process (Yazdi et al., 2022). Lastly, when making capital budgeting decisions, the company should also have clarity on the exit options and flexibility of the project, in case the circumstances change. This includes considering the resale value of capital investments.

Conclusion

In this report, discussions have been made on the financial performance analysis of Chevron and its competitive position in the industry. The company is seemingly performing better than its competitors in most accounts. However, there are also areas for improvement that Chevron must consider. As for the projects to undertake, the company should prioritise the NPV value given the challenging economic conditions it faces. In that context, project with higher NPV value should be selected for investment.

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