

NOTE: THIS REPORT HAS BOTH THE PARTS OF THE ASSIGNMENT



MCDONALD'S CORPORATION

COMPANY PROFILE

REG NO: 202454159

MB940 ACCOUNTING & FINANCIAL MANAGEMENT

ASSIGNMENT PART A

NOTE: THIS REPORT HAS BOTH THE PARTS OF THE ASSIGNMENT

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1. EXECUTIVE SUMMARY

This report evaluates McDonald's financial performance over the past three years, analyzing key indicators such as profitability, liquidity, efficiency, and financial leverage. McDonald's has maintained steady revenue growth, reaching \$25.5 billion in 2023, while profitability indicators such as ROCE (23.6%) and Net Profit Margin (33.2%) reflect strong financial discipline and cost control measures. However, declining Liquidity ratios (Current Ratio: 1.16) and increasing Debtor Payment Periods (35.6 days) highlight potential working capital challenges.

Despite its dominant market position, McDonald's faces challenges from inflationary pressures, changing consumer preferences, and increased competition from digital-driven QSR brands like Starbucks and Chipotle. The need for efficiency in working capital management, technological investment, and global expansion is more critical than ever.

To sustain its financial strength, McDonald's should enhance AI-driven automation, optimize supplier payment terms, and expand into high-growth emerging markets. Strengthening sustainability efforts and digital transformation will further drive profitability and long-term competitive advantage.



2. INTRODUCTION

McDonald's: A Global Fast-Food Leader

McDonald's is more than just a fast-food chain; it is a global leader in the quick-service restaurant (QSR) industry, operating in over 100 countries and serving millions of customers daily. Since its founding, McDonald's has become synonymous with affordability, convenience, and consistency, three pillars that define its success.

The company's franchise-based business model has been instrumental in its rapid global expansion and high-profit margins. By outsourcing operational responsibilities to franchise partners, McDonald's reduces capital investment while securing a steady revenue stream from royalties and lease agreements. This model allows McDonald's to maintain financial stability and scalability, making it one of the most profitable brands in the industry.

Adapting to an Evolving Market

The fast-food industry is experiencing rapid transformation, driven by shifting consumer preferences, economic fluctuations, and increased competition from both emerging and established brands. Modern consumers prioritize healthier options, sustainability, and digital convenience, pushing companies like McDonald's to continuously innovate.

The rise of food delivery services, self-order kiosks, and AI-powered personalization has redefined the industry, forcing brands to move beyond traditional fast-food models. Additionally, inflation and supply chain disruptions have heightened the need for cost efficiency and operational resilience. McDonald's ability to adapt to these shifts while sustaining its brand value has been a critical factor in its continued success.

2. Introduction

Financial Focus of the Report

This report analyzes McDonald's financial performance over the past three years, assessing key indicators such as profitability, liquidity, efficiency, and financial leverage. By evaluating financial statements and key ratios, this analysis highlights how McDonald's navigates industry challenges and positions itself for sustained growth. The findings will not only showcase the company's financial strengths but also pinpoint strategic areas for improvement, ensuring McDonald's remains a leader in the global fast-food market.



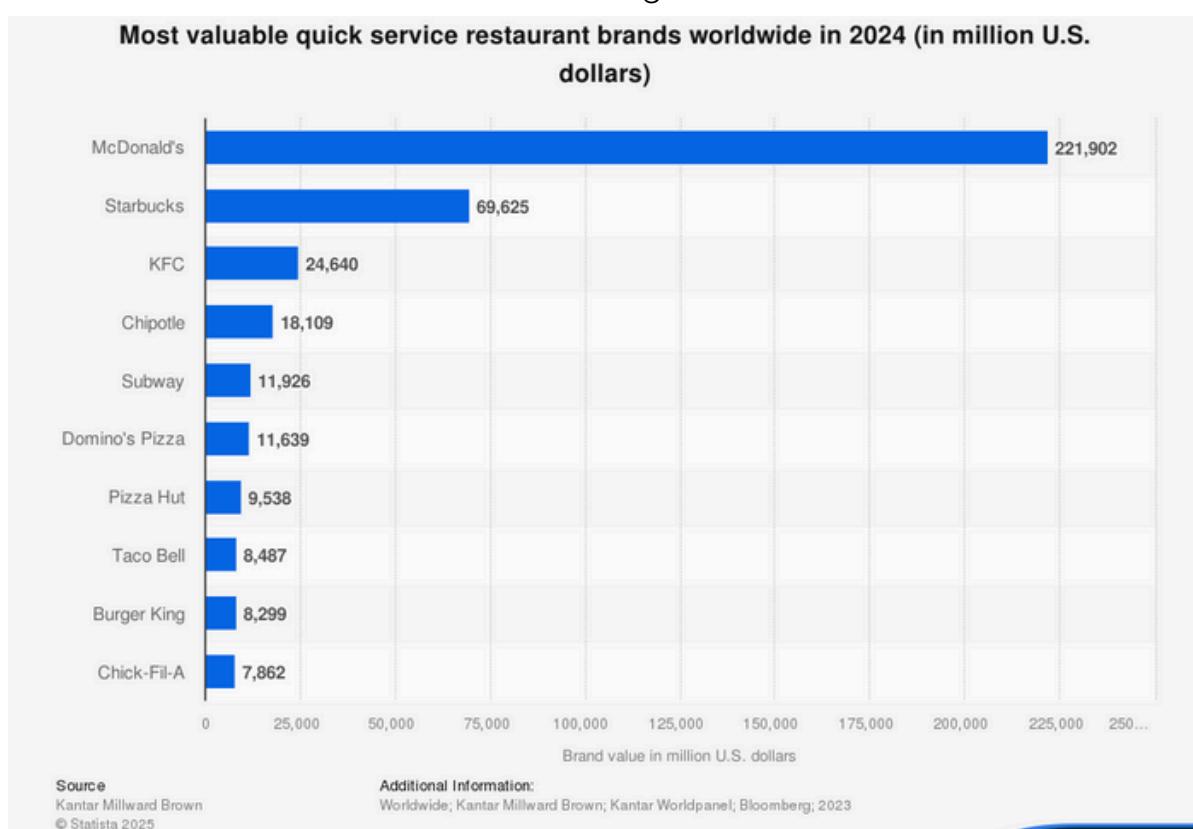
2. Introduction

Competitive Landscape Analysis

The quick-service restaurant (QSR) industry remains highly competitive, with Starbucks, KFC, Burger King, and Chipotle emerging as key rivals. McDonald's maintains the largest market share, driven by its global presence, franchise-based business model, and strong brand loyalty (Statista, 2024). However, competition is intensifying, with Starbucks dominating the coffee segment, KFC leading in the chicken category, and Chipotle expanding its influence in the fast-casual dining market.

Despite McDonald's strong brand equity, consumer preferences are shifting towards healthier food options, sustainability, and digital convenience, prompting competitors to innovate aggressively. Starbucks and Chipotle are gaining traction by focusing on premium product offerings and enhancing digital engagement strategies. To sustain its leadership, McDonald's must continue expanding its digital transformation efforts, enhancing menu innovation, and strengthening its global market reach.

The brand value rankings for 2024 further illustrate McDonald's market dominance, with a valuation of \$221.9 billion, significantly ahead of Starbucks (\$69.6 billion) and KFC (\$24.6 billion). However, maintaining this competitive advantage will require continued investment in customer experience, AI-driven technology, and operational efficiencies to address evolving market trends.



3. FINANCIAL PERFORMANCE ANALYSIS

3.1 Income Statement & Profitability Analysis

McDonald's has demonstrated strong financial performance over the past three years, reflecting consistent revenue growth and improved profitability despite macroeconomic challenges. Inflation, rising labor costs, and supply chain disruptions have impacted the industry, but McDonald's has successfully optimized its revenue streams and managed expenses, enabling it to sustain stable profit margins and high returns.

Revenue and Profitability Trends

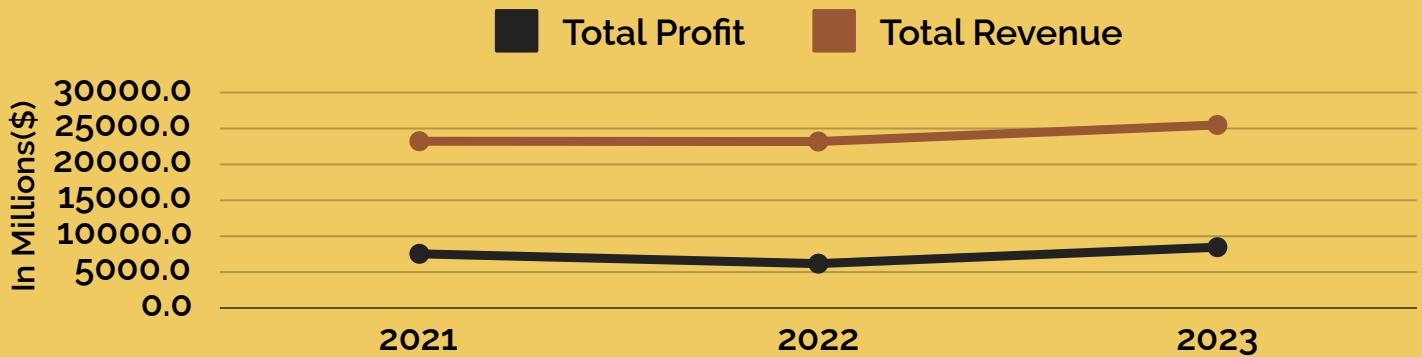
McDonald's total revenue rose to \$25,493.7 million in 2023, up from \$23,182.6 million in 2022 and \$23,222.9 million in 2021, reflecting steady growth despite economic challenges.

This increase is largely driven by the expansion of digital and delivery sales, including mobile ordering, loyalty programs, and third-party delivery partnerships, which have enhanced customer convenience and boosted transaction volumes. Additionally, higher contributions from franchised restaurants have strengthened financial stability, as franchise operations generate high-margin revenue with lower operational risks.

McDonald's has also optimized pricing strategies and introduced menu innovations to offset cost pressures while sustaining profitability. Through value-based pricing, premium offerings, and efficient cost management, the company has successfully navigated inflationary challenges, ensuring continued financial growth.



3.1 Income Statement & Profitability Analysis



RETURN ON CAPITAL EMPLOYED (ROCE)

Return on Capital Employed (ROCE) evaluates how efficiently McDonald's utilizes its capital (debt + equity) to generate profits. The increase in ROCE from 20.10% in 2022 to 23.63% in 2023 reflects strong financial efficiency and improved capital management, reinforcing the company's ability to generate higher returns on its investments.

This growth can be attributed to optimized asset utilization, where McDonald's has enhanced real estate efficiency and expanded its digital infrastructure, ensuring that each dollar invested generates maximum revenue. Additionally, the company's strategic capital investments have focused on high-return areas, such as restaurant modernization, automation, and AI-driven operational enhancements, which have contributed to increased efficiency and profitability.

Furthermore, higher franchise contributions have played a significant role in boosting ROCE. Since franchised restaurants require lower capital investment, McDonald's has effectively structured its capital allocation to minimize financial risks while maximizing returns. By leveraging its franchise model and reinvesting in high-value assets, the company has successfully strengthened its financial position and long-term profitability.

Year	2023	2022	2021
ROCE(%)	23.63	20.09	20.78

3.1 Income Statement & Profitability Analysis

The rising ROCE from 20.78% in 2021 to 23.63% in 2023 suggests that McDonald's is making highly efficient investments, ensuring strong shareholder value while effectively managing operational costs. This improvement reflects better capital allocation, strategic reinvestments in automation, and expansion in digital ordering systems, which enhance overall profitability.

GROSS PROFIT PERCENTAGE

Gross profit percentage measures how efficiently McDonald's controls direct costs (COGS) relative to revenue. The increase from 75.14% in 2021 to 76.76% in 2023 demonstrates McDonald's ability to leverage supplier negotiations, implement cost-cutting strategies, and optimize operational efficiencies.

McDonald's benefits from economies of scale, allowing bulk purchasing of ingredients and long-term supplier contracts to stabilize food costs. Despite rising commodity prices and labor expenses, McDonald's has streamlined its supply chain and adjusted pricing strategies to ensure that cost pressures do not erode profit margins.

Year	2023	2022	2021
Gross Profit Percentage	76.76	76.90	75.14



3.1 Income Statement & Profitability Analysis

McDonald's gross profit percentage remained stable at 76.76% in 2023, slightly lower than 76.90% in 2022 but an improvement from 75.14% in 2021. This consistency highlights the company's effective cost management and operational efficiency. The franchising model continues to be a major contributor, as franchised locations generate high-margin revenue while requiring lower direct costs. Additionally, menu innovation, particularly the introduction of higher-margin products such as McCafé beverages and premium burgers, has further strengthened profitability. Efficient cost control strategies, including strategic supplier agreements and automated kitchen operations, have also helped mitigate cost fluctuations, ensuring stable margins.

OPERATING MARGIN

McDonald's operating margin has also remained strong, benefiting from the same financial efficiencies that support gross profit. The franchising model reduces direct operational costs, allowing the company to maintain a lean cost structure while maximizing revenue. The introduction of higher-margin products has further driven profitability, while strategic sourcing and automation have enhanced cost stability and operational effectiveness. By optimizing its supply chain and restaurant processes, McDonald's has successfully offset inflationary pressures, reinforcing its competitive edge in the fast-food industry.

Year	2023	2022	2021
Operating Margin Percentage	45.68	40.42	44.59

3.1 Income Statement & Profitability Analysis

McDonald's operating margin rose to 45.68% in 2023, recovering from 40.42% in 2022 and surpassing 44.59% in 2021. The decline in 2022 was primarily due to higher labor and rental costs, driven by inflation. However, in 2023, the company enhanced operational efficiencies, improving productivity and profitability.

The adoption of self-service kiosks, AI-driven ordering, and automation helped reduce labor dependency, contributing to higher margins. Additionally, franchise royalties and rental income, which involve minimal operating costs, further boosted profitability.

The strong operating margin in 2023 underscores McDonald's ability to maintain financial resilience despite external economic pressures, reinforcing its competitive advantage in the QSR industry.

NET PROFIT PERCENTAGE

The net profit percentage measures how much of McDonald's revenue translates into actual profit after deducting all expenses, including taxes and interest payments. A decline in 2022 to 26.65% due to higher interest expenses from rising rates impacted profitability. However, in 2023, net profit rebounded to 33.22%, reflecting improved tax efficiency and financial restructuring, which lowered the effective tax rate and optimized cost management.

A better revenue mix also contributed to this recovery, with higher profits from franchised restaurants, which incur lower operating costs, strengthening McDonald's bottom line. The company's ability to sustain net profit margins above 33% reinforces its financial strength, cost efficiency, and pricing power in the market.

Year	2023	2022	2021
Net Profit Percentage	33.22	26.65	32.49

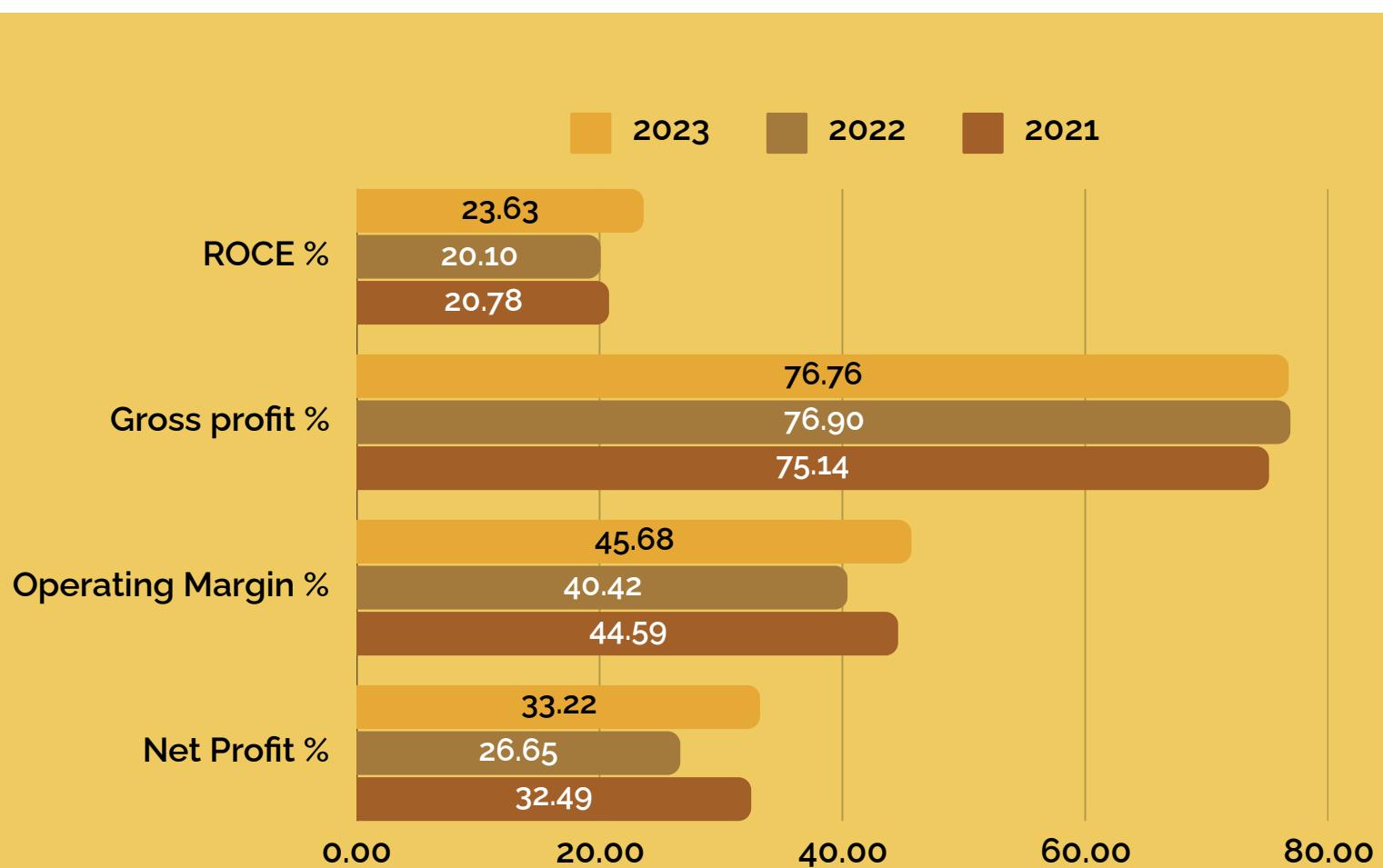
3.1 Income Statement & Profitability Analysis

FUTURE PROFITABILITY STRATEGIES

To sustain and improve its profitability, McDonald's should continue expanding its digital transformation efforts to further reduce labor costs and enhance operational efficiency. Investments in self-service kiosks, AI-driven automation, and mobile ordering platforms have already contributed to improved productivity, and further advancements in technology will drive additional cost savings.

Expanding franchise operations in high-growth markets remains a crucial strategy for maximizing high-margin revenue streams. Franchised locations generate steady income with lower operational risks, making them an essential component of McDonald's long-term financial strategy. Strengthening its presence in emerging markets with growing consumer demand will further enhance profitability.

Additionally, optimizing cost structures and refining pricing strategies will be critical in maintaining strong profit margins amid inflationary pressures. By leveraging bulk purchasing agreements, supply chain efficiencies, and strategic pricing adjustments, McDonald's can effectively offset rising costs while maintaining affordability and profitability.



3.2 Liquidity & Efficiency Analysis

3.2 Liquidity & Efficiency Analysis

McDonald's ability to manage short-term obligations, working capital, and asset efficiency is crucial in sustaining its financial stability. Liquidity ratios assess how easily a company can meet its short-term liabilities, while efficiency ratios evaluate how effectively assets are utilized to generate revenue. McDonald's capital-light franchising model significantly influences these metrics, as it reduces the need for high working capital while ensuring strong cash flow generation.

CURRENT RATIO

The current ratio reflects whether McDonald's has sufficient current assets to cover short-term liabilities. The declining trend from 1.78 in 2021 to 1.16 in 2023 suggests that McDonald's has been managing its working capital more aggressively, reducing excess cash holdings to optimize operations. The company relies on strong cash flow generation, minimizing the need for high levels of current assets. Despite the decline, a current ratio above 1.0 still indicates liquidity stability, as McDonald's operates on a cash-heavy business model, where revenues are received rapidly through daily transactions.

Year	2023	2022	2021
Current Ratio	1.164368	1.426633	1.778234

A lower current ratio is not necessarily a concern for McDonald's, as its negative cash conversion cycle allows it to collect payments faster than it pays suppliers. The ratio's decline from 1.78 in 2021 to 1.16 in 2023 reflects the company's efficiency in managing liquidity, ensuring that working capital is optimized rather than held in excess reserves.

3.2 Liquidity & Efficiency Analysis

QUICK RATIO (ACID-TEST RATIO)

The quick ratio, which excludes inventory, provides further insight into McDonald's short-term liquidity position. A ratio of 1.15 in 2023, down from 1.76 in 2021, indicates that the company still maintains sufficient liquid assets (cash and receivables) to cover immediate liabilities, despite reducing excess liquidity. This decline aligns with McDonald's operational efficiency strategy, which focuses on deploying capital effectively rather than holding large cash reserves.

Year	2023	2022	2021
Quick Ratio (Acid Test)	1.15667	1.412956	1.764403

ASSET TURNOVER

The asset turnover ratio measures how efficiently McDonald's utilizes its total asset base to generate revenue. The steady improvement from 0.50 in 2021 to 0.53 in 2023 reflects enhanced asset utilization and operational efficiency. This growth is driven by better asset deployment, particularly through digital innovations and drive-thru expansions, which have increased transaction volume.

Franchise expansion has also contributed to higher asset efficiency, as franchised locations require lower capital investment while generating consistent revenue streams. Additionally, McDonald's strong brand loyalty and high foot traffic ensure that its assets continue to drive strong revenue performance.

A rising asset turnover ratio signals strong operational performance and effective asset deployment, reinforcing McDonald's ability to maximize returns from its investments.

3.2 Liquidity & Efficiency Analysis

Year	2023	2022	2021
Asset Turnover	0.52935	0.515038	0.497217

STOCK TURNOVER

The stock turnover ratio reflects how frequently McDonald's sells and replenishes its inventory. With a ratio consistently around 3.2 to 3.5, the company demonstrates steady inventory turnover, indicating strong demand for its products while minimizing excess stock.

McDonald's efficient supply chain management plays a crucial role in maintaining optimal inventory levels, reducing food waste and storage costs. The slight decline in 2023 from 3.54 to 3.25 may be attributed to higher inventory holdings due to supply chain adjustments, ensuring operational resilience in a fluctuating market. A stable stock turnover ratio highlights McDonald's strong operational efficiency, allowing it to manage inventory effectively while sustaining profitability.

Year	2023	2022	2021
Stock Turnover (days)	3.252768	3.54455	3.514721

3.2 Liquidity & Efficiency Analysis

DEBTOR PAYMENT PERIOD

The debtor payment period measures how long McDonald's takes to receive payments from franchisees and customers. The increase from 29.4 days in 2021 to 35.6 days in 2023 suggests a shift in the company's credit policies and financial agreements with franchise partners.

McDonald's has extended credit terms for franchisees, offering them greater flexibility in payments. Additionally, the rise in franchise revenue may have led to slightly longer payment periods, as franchisees operate under structured financial agreements. Despite this increase, the debtor period remains at a manageable level, ensuring timely cash inflows and stable liquidity.

Year	2023	2022	2021
Debtor Payment Period (days)	35.62135	33.29976	29.42897



3.2 Liquidity & Efficiency Analysis

CREDITOR PAYMENT PERIOD

McDonald's has increased its creditor payment period, meaning it takes longer to settle payments with suppliers. The extension from 118.3 days in 2021 to 153.3 days in 2023 highlights the company's stronger negotiating power, allowing it to retain cash for longer periods. Additionally, flexible supply chain agreements provide extended payment terms, optimizing working capital management. This strategic move ensures enhanced liquidity, enabling McDonald's to allocate funds efficiently while maintaining operational stability.

Year	2023	2022	2021
Creditor Payment Period (days)	153.2744	144.1677	118.3627

CASH CONVERSION CYCLE

McDonald's ability to manage short-term obligations, working capital, and asset efficiency is crucial in sustaining its financial stability. Liquidity ratios assess how easily a company can meet its short-term liabilities, while efficiency ratios evaluate how effectively assets are utilized to generate revenue. McDonald's capital-light franchising model significantly influences these metrics, as it reduces the need for high working capital while ensuring strong cash flow generation.

McDonald's increasingly negative cash conversion cycle (CCC) underscores its highly efficient liquidity management. The CCC declined from -85.4 days in 2021 to -114.4 days in 2023, indicating that McDonald's collects revenue from customers well before it needs to settle supplier payments. This structure enables the company to operate with minimal working capital while maintaining strong cash reserves.

3.2 Liquidity & Efficiency Analysis

The negative CCC reflects a cash-rich business model, where McDonald's leverages extended supplier payment terms to optimize cash flow. By reducing reliance on external financing and enhancing financial flexibility, the company maximizes its cash position while ensuring sustainable growth.

Year	2023	2022	2021
Cash Conversion Cycle	-114.4	-107.323	-85.419

FUTURE STRATEGIES

The negative CCC reflects a cash-rich business model, where McDonald's leverages extended supplier payment terms to optimize cash flow. By reducing reliance on external financing and enhancing financial flexibility, the company maximizes its cash position while ensuring sustainable growth.



3.3 Financing & Debt Analysis

3.3 Financing & Debt Analysis

McDonald's capital structure and debt management play a critical role in sustaining financial stability and growth. The company strategically uses debt to fund expansion, enhance shareholder returns, and drive operational improvements while ensuring that financial risks remain under control.

GEARING RATIO

The gearing ratio measures McDonald's financial leverage, indicating the proportion of debt relative to shareholders' equity. The fluctuations from 1.15 in 2021 to 1.20 in 2022, and back to 1.14 in 2023, suggest that McDonald's has maintained a well-balanced capital structure, ensuring that its debt levels remain manageable.

The slight decline in gearing in 2023 implies a reduction in financial leverage, likely driven by higher cash flow generation, reducing the need for additional borrowing. While a gearing ratio above 1.0 suggests reliance on debt financing, this is not necessarily a risk for McDonald's, given its strong cash flow and sustained profitability, which allow the company to service its debt efficiently.

Year	2023	2022	2021
Gearing Ratio	1.145062	1.200782	1.148316



3.3 Financing & Debt Analysis

INTEREST COVER RATIO

The interest cover ratio evaluates McDonald's ability to meet its interest obligations using operating profits. The decline in 2022 to 7.76, followed by a recovery to 8.56 in 2023, suggests fluctuations in borrowing costs and profitability. The increase in interest expenses in 2022 was primarily due to higher debt levels and rising borrowing costs. However, in 2023, improved operating profits strengthened McDonald's ability to cover interest payments, demonstrating effective cash flow management. An interest cover ratio above 8.0 indicates that McDonald's comfortably meets its interest obligations, ensuring lower financial risk and sustained debt servicing capability.

Year	2023	2022	2021
Interest Cover	8.558715	7.763877	8.733345



4. RECOMMENDATIONS FOR FUTURE PERFORMANCE

To sustain long-term growth, McDonald's should prioritize working capital optimization, digital expansion, market penetration, and sustainability initiatives. These strategic efforts will enhance efficiency, customer engagement, and competitive positioning, ensuring continued market leadership.

Despite strong cash flow, McDonald's debtor (35.6 days) and creditor payment periods (153.3 days) highlight opportunities for improvement (Bloomberg, 2023). Strengthening franchise payment collection, extending supplier payment terms, and leveraging AI-driven inventory management can further optimize liquidity, ensuring a stronger financial position.

With competitors advancing in digital transformation, McDonald's must expand AI-driven personalization, self-service kiosks, and mobile ordering to enhance operational efficiency and customer convenience (McKinsey & Company, 2023). Loyalty programs and automation will drive revenue growth and improve cost efficiency.

Expanding into emerging markets in Asia, the Middle East, and Africa presents new growth opportunities. A localized approach, with regional menus, digital-friendly formats, and strategic franchise partnerships, will enhance market penetration (Harvard Business Review, 2023). Additionally, sustainability remains key to brand loyalty and regulatory compliance. Investing in plant-based menus, waste reduction, and renewable energy will align McDonald's with evolving consumer preferences and global sustainability goals.



5. CONCLUSION

McDonald's has demonstrated strong financial performance over the past three years, maintaining consistent revenue growth, profitability, and cash flow efficiency despite economic challenges. The company's franchise-driven model, cost control strategies, and digital transformation initiatives have reinforced its market leadership in the highly competitive quick-service restaurant (QSR) industry.

While McDonald's remains financially stable, it faces challenges such as rising operational costs, increasing competition, and evolving consumer preferences, requiring continuous adaptation. To sustain long-term success, the company must optimize working capital, enhance digital capabilities, expand into high-growth markets, and strengthen sustainability efforts.

Strategic investments in AI-driven automation, customer engagement, and menu innovation will be crucial for profitability and competitive advantage. Additionally, expanding into emerging regions and reinforcing ESG commitments will align McDonald's with evolving industry trends and consumer demands, ensuring its continued success in the global market.



6. APPENDIX

Profitability ratios			
ROCE			
Year	2023	2022	2021
ROCE	23.63	20.09	20.78
Net Profit	11646.70	9371.00	10356.00
Total assets	56146.80	50435.60	53854.30
Total current liabilities	6859	3802.1	4020
Gross Profit Percentage			
Year	2023	2022	2021
Gross Profit Percentage	76.76	76.90	75.14
Gross Profit	19568.90	17827.90	17448.90
Total revenues	25493.70	23182.60	23222.90
Operating Margin			
Year	2023	2022	2021
Operating Margin	45.68	40.42	44.59
Operating profit	11646.70	9371.00	10356.00
Total revenues	25493.70	23182.60	23222.90
Net Profit Percentage			
Year	2023	2022	2021
Net Profit Percentage	33.22	26.65	32.49
Profit after Tax	8468.8	6177.4	7545.2
Total revenues	25493.70	23182.60	23222.90

6. Appendix

Liquidity Ratio			
Current Ratio			
Year	2023	2022	2021
Current Ratio	1.164368	1.426633	1.778234
Total current assets	7986.4	5424.2	7148.5
Total current liabilities	6859	3802.1	4020
Quick Ratio (Acid Test)			
Year	2023	2022	2021
Quick Ratio (Acid Test)	1.15667	1.412956	1.764403
Total current assets	7986.4	5424.2	7148.5
Inventories, at cost, not in excess of market	52.8	52	55.6
Total current liabilities	6859	3802.1	4020

Financing Ratio			
Gearing Ratio			
Year	2023	2022	2021
Gearing Ratio	1.145062	1.200782	1.148316
Long-term debt	37152.9	35903.5	35622.7
Total shareholders' equity (deficit)	-4706.7	-6003.4	-4601
Interest Cover			
Year	2023	2022	2021
Interest Cover	8.558715	7.763877	8.733345
Net Profit	11646.7	9371	10356
Interest expense	1360.8	1207	1185.8

6. Appendix

Statement of Income of McDonald's Corporation			
Years ended December 31	2023	2022	2021
In millions	\$	\$	\$
Revenues :-			
Sales by Company-operated restaurants	9741.6	8748.4	9787.4
Revenues from franchised restaurants	15436.5	14105.8	13085.4
Other revenues	315.6	328.4	350.1
Total revenues	25493.7	23182.6	23222.9
Cost of Goods Sold (COGS) :-			
Food & paper	3039	2737.3	3096.8
Payroll & employee benefits	2885.8	2617.4	2677.2
Total COGS	5924.8	5354.7	5774
Gross Profit	19568.9	17827.9	17448.9
Operating Expense :-			
Occupancy & other operating expenses	2299.3	2026.2	2273.3
Franchised restaurants-occupancy expenses	2474.6	2349.7	2335
Other restaurant expenses	232.5	244.8	260.4
Depreciation and amortization	381.7	370.4	329.7
Other	2435.2	2492.2	2377.8
Other operating (income) expense, net	98.9	973.6	-483.3
Total operating expense	7922.2	8456.9	7092.9
Operating profit	11646.7	9371	10356
Interest paid :-			
Interest expense-net of capitalized interest of \$14.5, \$9.5 and \$6.8	1360.8	1207	1185.8
Nonoperating (income) expense, net	-236.3	338.6	42.3
Profit before Tax	10522.2	7825.4	9127.9
Taxes:-			
Provision for income taxes	2053.4	1648	1582.7
Profit after Tax	8468.8	6177.4	7545.2
Earnings per common share-basic	11.63	8.39	10.11
Earnings per common share-diluted	11.56	8.33	10.04
Dividends declared per common share	6.23	5.66	5.25
Weighted-average shares outstanding-basic	727.9	736.5	746.3
Weighted-average shares outstanding-diluted	732.3	741.3	751.8

6. Appendix

Statement of Financial Position of McDonald's Corporation			
Years ended December 31	2023	2022	2021
In millions	\$	\$	\$
ASSETS			
Current assets :-			
Cash and equivalents	4579.3	2583.8	4709.2
Accounts and notes receivable	2488	2115	1872.4
Inventories, at cost, not in excess of market	52.8	52	55.6
Prepaid expenses and other current assets	866.3	673.4	511.3
Total current assets	7986.4	5424.2	7148.5
Non-current assets :-			
Lease right-of-use asset, net	13514.4	12565.7	13552
Property and equipment #1	24907.6	23773.6	24720.6
Other Assets :-			
Investments in and advances to affiliates	1080.2	1064.5	1201.2
Goodwill	3040.4	2900.4	2782.5
Miscellaneous	5617.8	4707.2	4449.5
Total assets	56146.8	50435.6	53854.3
SHAREHOLDERS' EQUITY AND LIABILITIES			
Current liabilities :-			
Short-term borrowings and current maturities of long-term debt	2192.4		
Accounts payable	1102.9	980.2	1006.8
Lease liability	688.1	661.1	705.5
Income taxes	705.1	274.9	360.7
Other taxes	268	255.1	236.7
Accrued interest	468.9	393.4	363.3
Accrued payroll and other liabilities	1433.6	1237.4	1347
Total current liabilities	6859	3802.1	4020
Non-current liabilities :-			
Long-term debt	37152.9	35903.5	35622.7
Long-term lease liability	13057.7	12134.4	13020.9
Long-term income taxes	363.2	791.9	1896.8
Deferred revenues - initial franchise fees	790.1	757.8	738.3

6. Appendix

Continued...

Other non-current liabilities :-			
Other long-term liabilities	949.7	1051.8	1081
Deferred income taxes	1680.9	1997.5	2075.6
Shareholders' equity :-			
Common stock, \$0.01 par value; authorized – 3.5 billion shares; issued – 1,660.6 million shares	16.6	16.6	16.6
Additional paid-in capital	8892.9	8547.1	8231.6
Retained earnings	63479.9	59543.9	57534.7
Accumulated other comprehensive income (loss)	-2456	-2486.6	-2573.7
Common stock in treasury	-74640.1	-71624.4	-67810.2
Total shareholders' equity (deficit)	-4706.7	-6003.4	-4601
Total liabilities and shareholders' equity (deficit)	56146.8	50435.6	53854.3

FOOT NOTE				
S.No.	Notes to account			
#1	Property and equipment, at cost	43570	41037.6	41916.6
	Accumulated depreciation and amortization	-18662.4	-17264	-17196
	Net property and equipment	24907.6	23773.6	24720.6

6. Appendix

Cash Flow Statement of McDonald's Corporation			
Years ended December 31	2023	2022	2021
In millions	\$	\$	\$
Operating activities :-			
Net income	8468.8	6177.4	7545.2
Adjustments to reconcile to cash provided by operations			
Charges and credits			
Depreciation and amortization	1978.2	1870.6	1868.1
Deferred income taxes	-686.4	-345.7	-428.3
Share-based compensation	175.2	166.7	139.2
Net (gain) loss on sale of restaurant and other businesses	-103.2	732.7	-97.8
Other	-112.7	-570.4	-339.1
Changes in working capital items			
Accounts receivable	-161	-264.1	309.9
Inventories, prepaid expenses and other current assets	16.7	5.6	-62.2
Accounts payable	50.4	31.3	225
Income taxes	-220.3	-546.7	-302.5
Other accrued liabilities	206.2	129.3	284
Cash flow from operating activities	9611.9	7386.7	9141.5
Investing activities :-			
Capital expenditures	-2357.4	-1899.2	-2040
Purchases of restaurant businesses	-441.2	-807	-374.2
Sales of restaurant and other businesses	195.3	445.9	196.2
Sales of property	94.9	38.9	106.2
Other	-676.1	-456.7	-53.9
Cash flow from investing activities	-3184.5	-2678.1	-2165.7

6. Appendix

Continued...

Financing activities :-			
Net short-term borrowings	212.8	25.5	15.1
Long-term financing issuances	5221.1	3374.5	1154.4
Long-term financing repayments	-2441.1	-2202.4	-2240
Treasury stock purchases	-3054.3	-3896	-845.5
Common stock dividends	-4532.8	-4168.2	-3918.6
Proceeds from stock option exercises	259.8	248.2	285.7
Other	-39.6	38.2	-46.7
Cash flow from financing activities	-4374.1	-6580.2	-5595.6
Effect of exchange rates on cash and equivalents	-57.8	-253.8	-120.1
Cash and equivalents increase (decrease)	1995.5	-2125.4	1260.1
Cash and equivalents at beginning of year	2583.8	4709.2	3491.1
Cash and equivalents at end of year	4579.3	2583.8	4709.2
Supplemental cash flow disclosures			
Interest paid	1286.9	1183.5	1197.3
Income taxes paid	2992.9	3023.5	2403.9

REFERENCE

Bloomberg (2023) *Global Economic Trends Impacting the Fast-Food Industry*. Available at: <https://www.bloomberg.com> (Accessed: 19 January 2024).

Harvard Business Review (2023) *Franchising and Cost Control in the QSR Industry*. Available at: <https://hbr.org> (Accessed: 15 January 2024).

McDonald's Corporation (2021) *Annual Report 2021*. Available at: <https://corporate.mcdonalds.com> (Accessed: 16 January 2024).

McDonald's Corporation (2022) *Annual Report 2022*. Available at: <https://corporate.mcdonalds.com> (Accessed: 18 January 2024).

McDonald's Corporation (2023) *Annual Report 2023*. Available at: <https://corporate.mcdonalds.com> (Accessed: 21 January 2024).

McKinsey & Company (2023) *The Future of Quick-Service Restaurants: Digital and AI Transformation*. Available at: <https://www.mckinsey.com/industries/retail/our-insights> (Accessed: 17 January 2024).

Statista (2024) *Most valuable quick service restaurant brands worldwide in 2024*. Available at: <https://www.statista.com/statistics/273057/brand-value-of-leading-global-qsr-brands> (Accessed: 20 January 2024).





DEF PLC

**STRATEGIC
FINANCIAL
ANALYSIS AND
INVESTMENT
DECISION-MAKING**

ASSIGNMENT PART B

CONTENTS

1. Capital Budgeting Analysis
2. Share Price Valuation
3. Financing Decision
4. Appendix

1. CAPITAL BUDGETING ANALYSIS

(a) Net Present Value (NPV) and Internal Rate of Return (IRR) Calculation

To assess the financial feasibility of DEF PLC's proposed investment in a new product, we apply two fundamental capital budgeting techniques: Net Present Value (NPV) and Internal Rate of Return (IRR). These methodologies ensure a rigorous financial evaluation by analyzing projected cash flows, investment costs, and the required return of 14%, which serves as the company's discount rate for investment decisions.

Investment Assumptions and Cost Structure

Assumption	Details
Total Initial Investment	£16.05 million, covering new plant and machinery, development costs, and opportunity costs for testing equipment.
Sunk Cost Exclusion	£3.6 million in previously incurred product development expenses is considered a sunk cost and is excluded from NPV calculations as it does not affect future cash flows.
Revenue Estimates	Selling price of £55 per unit, with sales volume projections of 180,000 units in Year 1, increasing to 210,000 units per year from Year 2 onwards.
Direct Manufacturing Cost	£26 per unit, covering raw materials and production costs.
Fixed Costs	£250,000 per year, including 30% of allocated rent space costs.
General Overhead Charge	Allocated cost that does not represent a direct cash outflow; excluded from NPV calculations to ensure accurate financial assessment.
Marketing Expenses	A one-time expense of £200,000 in Year 0, allocated to product launch and market entry strategies.
Depreciation Method	Straight-line depreciation over six years, accounting for the asset's useful life.
Resale Value	Expected £1 million terminal value at the end of Year 6.
Corporate Tax Rate	25%, applied to ensure accurate after-tax return assessments.

1. Capital Budgeting Analysis

DEF PLC						
Already undertake cost (£) (Sunk cost)		3600000				
Further development cost (£)		600000				
Investment on plant and machinery (£)		15000000				
Life(years)		6				
Machinery resale (£)		1000000				
Testing machinery (£) (Opportunity cost)		450000				
Rent space(p.a)		100000				
Fixed cost (£)		250000				
Overhead (£)		10% of revenue				
Selling price per unit (£)		55				
Sales per annum for 1st year(units)		180000				
Sales per annum for rest of year(units)		210000				
Marketing cost (£)		200000				
Direct manufacturing cost per unit (£)		26				
Hold stock (%)		20				
Rate of return(%)		14				
Tax rate(%)		25				
Staright line depripcion		-2333333.333				
Initial Investment Table						
Item	Amount (£)					
Further development cost	600000					
New plant & machinery	15000000					
Opportunity cost of testing equipment	450000					
Total Initial Investment	16050000					
Sales Revenue Calculation Table	1					
Year		2	3	4	5	6
Units Sold	180000	210000	210000	210000	210000	210000
Selling Price (£)	55	55	55	55	55	55
Total Revenue (£)	9900000	11550000	11550000	11550000	11550000	11550000

1. Capital Budgeting Analysis

PROFIT & LOSS ACCOUNT							
Year	0	1	2	3	4	5	6
Revenues	-16050000	9900000	11550000	11550000	11550000	11550000	11550000
Direct Costs		-4680000	-5460000	-5460000	-5460000	-5460000	-5460000
Fixed Costs		-250000	-250000	-250000	-250000	-250000	-250000
Marketing	-200000						
Depreciation (Capital Allowances)		-2333333.333	-2333333.333	-2333333.3	-2333333.333	-2333333.333	-2333333.333
Resale (Capital Adjustment)							1000000
EBT	-16250000	2636666.667	3506666.667	3506666.7	3506666.667	3506666.667	4506666.667
Tax	0	-659166.6667	-876666.6667	-876666.67	-876666.6667	-876666.6667	-1126666.667
Profit after tax	-16250000	1977500	2630000	2630000	2630000	2630000	3380000

P&L Statement

CASH FLOW STATEMENT							
Year	0	1	2	3	4	5	6
Revenues (£)	-16050000	9900000	11550000	11550000	11550000	11550000	11550000
Direct Costs (£)		-4680000	-5460000	-5460000	-5460000	-5460000	-5460000
Fixed Costs (£)		-250000	-250000	-250000	-250000	-250000	-250000
Marketing (£)	-200000						
Resale (Capital Adjustment)							1000000
Cash flows	-16250000	4970000	5840000	5840000	5840000	5840000	6840000
Tax (£)	0	-659166.6667	-876666.6667	-876666.67	-876666.6667	-876666.6667	-1126666.667
Net Cash Flow (NCF) (£)	-16250000	4310833.333	4963333.333	4963333.3	4963333.333	4963333.333	5713333.333
Present Value Coefficient (PVC)	1	0.877192982	0.769467528	0.6749715	0.592080277	0.519368664	0.455586548
Present Value of Cash Flows	-16250000	3781432.749	3819123.833	3350108.6	2938691.777	2577799.804	2602917.809
NPV	2820074.597						
IRR	20%						

Cashflow Statement

1. Capital Budgeting Analysis

NPV Calculation

The Net Present Value (NPV) method assesses the present value of expected future cash flows by discounting them at the required return of 14%. The resulting **NPV of £2.82 million** is **positive**, indicating that the project is anticipated to generate more value than its cost. A positive NPV signifies that the project will enhance shareholder value, making it a financially viable investment. Given this result, the project should be accepted based on capital budgeting principles.

IRR Calculation and Interpretation

The Internal Rate of Return (IRR) represents the discount rate at which the NPV becomes zero, effectively determining the project's return on investment.

The IRR for this project is calculated at 20%, which is significantly **higher** than the **14% required return**. This confirms that the project will yield returns exceeding the company's cost of capital, making it a strong investment opportunity.

Since the IRR surpasses the required threshold, it indicates that DEF PLC can expect substantial financial gains from this investment. A high IRR further enhances the project's attractiveness, reinforcing its potential to deliver sustained profitability.

Decision Justification

A project with a positive NPV and an IRR exceeding the required rate of return is considered financially feasible. The projected positive cash flows from Year 1 onward suggest that the investment will start generating returns relatively quickly, improving cash flow stability and overall financial performance.

These results provide strong confidence in the project's viability, supporting the expectation that it will yield sustainable profits over the projected period. DEF PLC should proceed with the investment, as it aligns with the company's financial objectives and strategic growth plans.

1. Capital Budgeting Analysis

(b) Sensitivity Analysis on Selling Price and Sales Volume

Sensitivity analysis evaluates how fluctuations in selling price and sales volume impact the project's profitability. This is essential in assessing financial risk, as even minor changes in these factors can significantly affect cash flows and investment viability.

Impact of Selling Price Changes

In the base case scenario, where the selling price is £55 per unit, the NPV is £3.91 million, and the IRR stands at 20%. If the selling price increases by 10%, the NPV rises to £6.08 million, and the IRR improves to 26%, reinforcing the project's strong profitability potential.

Conversely, in a pessimistic scenario, where the selling price decreases by 10%, the NPV turns negative (-£439.931), and the IRR drops to 13%, indicating that the project would no longer be financially viable at this lower price point.

Impact of Sales Volume Changes

For sales volume, the base case assumes 210,000 units sold per year, maintaining an NPV of £3.91 million and an IRR of 20%. In an optimistic scenario, where sales volume increases by 10%, the NPV improves to £4.54 million, and the IRR reaches 23%, demonstrating the project's resilience under favorable market conditions.

However, if sales volume declines by 10%, the NPV remains positive at £1.1 million, and the IRR slightly increases to 16%, suggesting that the project can still generate returns even under moderate demand reductions.

1. Capital Budgeting Analysis

Factor	Scenario	NPV (£)	IRR
Selling Price	Base Case (£55/unit)	3906743.132	20
	Optimistic (+10%)	6080080.201	26
	Pessimistic (-10%)	-439931.0078	13
Sales Volume	Base Case (210,000 units)	3906743.132	20
	Optimistic (+10%)	4538986.643	23
	Pessimistic (-10%)	1101162.551	16

IRR and NPV for sensitivity analysis

1. Capital Budgeting Analysis

Conclusion from Sensitivity Analysis

The sensitivity analysis reveals that the project's viability is significantly influenced by the selling price. A reduction of 10% in price results in a negative NPV, highlighting the importance of maintaining a pricing strategy above £50 per unit. Sales volume fluctuations have a less drastic effect, as the project remains profitable even with a 10% reduction in demand. This analysis underscores the importance of effective pricing and market demand forecasting in ensuring the project's success.

Key Takeaways from Sensitivity Analysis

- Selling price sensitivity is critical – A 10% price decrease turns NPV negative, making price stability a key profitability driver.
- Sales volume changes have lower risk – Even with a 10% decline in sales volume, the project remains profitable, showcasing demand resilience.
- Upside potential in both factors – Increasing either price or sales volume by 10% significantly enhances the project's profitability and IRR.

Strategic Implications

- Pricing Strategy: DEF PLC should maintain a price floor of £50 per unit to avoid financial losses.
- Market Demand Focus: While volume fluctuations are manageable, demand expansion efforts (e.g., marketing, customer acquisition) can further strengthen project viability.
- Risk Mitigation: Implement flexible pricing mechanisms and customer retention strategies to ensure price and demand stability in different market conditions.

By incorporating these insights, DEF PLC can optimize profitability and minimize financial risks, ensuring long-term project success.

1. Capital Budgeting Analysis

(c) Potential Risks Associated with the Investment

While the financial analysis supports the investment, certain risks must be considered. Market demand risk poses a significant challenge, as the project assumes a stable demand of 210,000 units annually. Any shift in consumer preferences, economic downturns, or increased competition could reduce sales, negatively impacting profitability. To mitigate this, market research, competitive analysis, and adaptive pricing strategies should be implemented to maintain demand stability.

Cost overruns and inflation present another risk, as direct manufacturing costs may rise due to supplier price increases, thereby affecting net cash flows. Implementing cost-control measures, long-term supplier contracts, and efficiency improvements can help mitigate this risk.

Another critical factor is pricing sensitivity. The sensitivity analysis indicates that a 10% price drop could make the project unviable. To address this, DEF PLC should focus on strong branding, product differentiation, and effective marketing strategies to maintain pricing power. Additionally, diversifying revenue streams and exploring cost-saving innovations can enhance resilience against pricing pressures.

Economic and regulatory risks also require attention, as potential changes in interest rates, tax policies, or inflation rates could impact the company's required return. Monitoring macroeconomic indicators and adjusting financial strategies proactively will help mitigate these risks.

Competitive pressure is another concern, as new entrants or aggressive pricing by competitors could erode market share. Investing in product innovation, improving customer engagement, and maintaining high service standards will help sustain a competitive advantage.

1. Capital Budgeting Analysis

Final Recommendation

Based on a thorough analysis of NPV, IRR, and sensitivity scenarios, the project is financially viable under the base case assumptions. Despite certain risks, proper mitigation strategies can enhance its resilience. The investment is expected to generate sustainable profits, with positive cash flows from Year 1 onward. Given the project's strong financial metrics and strategic importance, DEF PLC should proceed with the investment while implementing robust risk management strategies to safeguard its returns.

By integrating pricing controls, demand monitoring, and competitive strategies, DEF PLC can maximize profitability and minimize risk exposure, ensuring long-term financial stability and market competitiveness.

2. SHARE PRICE VALUATION

To determine the value of DEF PLC's shares, the Dividend Discount Model (DDM) is employed, which values a stock based on the present value of its expected future dividends. The model is appropriate given the company's established dividend policy and consistent dividend payouts.

Key Assumptions and Inputs

The valuation is based on several key assumptions:

- Constant Dividend Growth Assumption: Future dividends are projected to grow at a steady rate beyond the forecasted period.
- Required Rate of Return: The investor's expected return reflects the risk associated with DEF PLC's stock.
- Projected Dividend Payments: Dividend estimates for the next five years have been included, followed by a terminal growth rate thereafter.
- Standard DDM Formula: The calculation aggregates the present values of expected dividends during the forecast period and the present value of the terminal value.

Dividend Discount Model (DDM) Calculations

Year	Expected Dividend Price(£)	Discount Factor	Present value of dividend (£)
0			
1	0.1	0.909090909	0.090909091
2	0.12	0.826446281	0.099173554
3	0.14	0.751314801	0.105184072
4	0.16	0.683013455	0.109282153
5	0.25	0.620921323	0.155230331
Total Present Value of Dividends for first 5 years			0.5597792

2. Share Price Valuation

Intrinsic Share Price Calculation

Required Rate of Return	10%
Selling Price (£)	4
Growth after 6 years	4%
Terminal Value (£)	4.333333333
Present value of stock after 6 years	2.690659067
Total value of the stock(£)	3.250438267

The calculated intrinsic share price for DEF PLC is £3.25, while the market price of the share is £4.00.

Overvaluation or Undervaluation Assessment

To determine whether the stock is overvalued or undervalued, the calculated share price must be compared to the market price. Since the market price of £4.00 is higher than the intrinsic value of £3.25, the stock is considered overvalued. This suggests that the stock may be priced above its fundamental worth, potentially signaling a sell opportunity for investors. The overvaluation could be driven by market speculation, investor sentiment, or macroeconomic factors.

Had the market price been below £3.25, it would have indicated an undervalued stock, presenting a buying opportunity. Given the observed market premium, investors should exercise caution and assess whether DEF PLC's overvaluation is justified by future growth expectations.

2. Share Price Valuation

Conclusion and Recommendation

The calculated intrinsic share price of £3.25 suggests that the stock is currently overvalued in the market at £4.00. This overvaluation implies that investors may be paying a premium beyond the company's fundamental value, likely driven by speculative factors, market sentiment, or short-term demand trends.

Given this, investors should carefully evaluate DEF PLC's growth trajectory, industry positioning, and macroeconomic conditions before making investment decisions. If the company fails to achieve significant future earnings growth, a price correction is likely, making the current market price unsustainable.

Investment Recommendation:

- For existing investors: This may be an opportune moment to take profits by selling shares, as the current price reflects a premium over the intrinsic value.
- For potential investors: A wait-and-watch approach is recommended until a correction brings the stock closer to its fair value. Alternatively, investors seeking long-term positions should assess DEF PLC's ability to sustain dividend growth before entering the market.

The DDM valuation serves as a critical benchmark, helping investors make informed decisions by assessing whether the current premium is justified by future earnings expectations.

3. FINANCING DECISION

Factors to Consider in Choosing Between Debt and Equity Financing

DEF PLC requires £100 million to invest in future projects. The decision on whether to raise capital through debt financing, equity financing, or a combination of both carries significant implications for the company's financial structure, cost of capital, risk exposure, and strategic growth potential.

Debt financing allows DEF PLC to secure funding without diluting shareholder ownership, ensuring that existing investors retain control over decision-making. Additionally, interest payments on debt are tax-deductible, effectively reducing the net cost of borrowing. However, the obligation to make fixed interest and principal repayments increases financial risk, particularly if future cash flows become unstable. This can restrict operational flexibility and require careful management of leverage levels.

In contrast, equity financing does not require fixed repayments, offering greater flexibility in cash flow management. However, issuing new shares results in ownership dilution, where new investors gain partial control of the company. Furthermore, dividends are paid from after-tax profits and do not provide the same tax advantages as interest on debt. Market conditions and investor sentiment play a critical role in determining whether an equity offering will be successful and at what valuation. Equity financing reduces financial risk associated with leverage, but it typically comes at a higher cost, as shareholders expect higher returns on their investment.

Considering DEF PLC's financial position, market conditions, and strategic priorities, a balanced financing approach is recommended to optimize cost efficiency while maintaining financial resilience.

3. Financing Decision

Financial Position Analysis Using Appendix A

To assess whether DEF PLC should favor debt or equity financing, we analyze the financial statements and key ratios.

1. Debt-to-Equity Ratio

A debt-to-equity ratio of 0.576, which has decreased from 0.634 in 2023, suggests that DEF PLC has reduced its financial leverage while maintaining a strong equity base. This moderate level of debt allows room for additional borrowing without significantly increasing financial risk.

Debt to equity ratio	0.576131687	0.634146341
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2. Interest Coverage Ratio

A high interest coverage ratio of 9.93, an improvement from 8.38 in 2023, indicates that DEF PLC generates sufficient earnings to comfortably cover interest obligations. This strong liquidity position suggests that additional debt

Interest cover ratio	9.928571429	8.384615385
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3. Return on Equity (ROE)

An increasing ROE from 17.56% in 2023 to 19.34% in 2024 reflects strong profitability and effective use of equity capital. Higher ROE suggests that shareholders are receiving better returns, making equity financing an attractive option without over-reliance on debt.

Return on equity	19.34156379	17.56097561
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3. Financing Decision

Justification Based on Share Price Valuation (Question 2)

In Question 2, the intrinsic share price was calculated at £3.25, whereas the current market price is £4.00, indicating that DEF PLC's stock is overvalued. This has key implications for financing decisions:

Raising Equity Now Could Be Advantageous

- Since the market currently overvalues shares, issuing new equity at £4.00 per share instead of £3.25 allows DEF PLC to raise capital efficiently with less dilution for existing shareholders.
- This strategy leverages favorable market conditions to secure funding without excessively impacting current ownership.

Avoiding Excessive Equity Issuance

- While equity financing is beneficial, issuing too many new shares could lead to a market correction and lower share prices.
- A balanced approach, combining both debt and equity, would mitigate this risk.

3. Financing Decision

Final Recommendation: Hybrid Financing Approach

Based on the financial analysis, DEF PLC should pursue a hybrid financing strategy by raising 55% of the required £100 million through debt (£55 million) and 45% through equity (£45 million). The rationale for this recommendation is:

1. Debt Financing Is Cost-Effective

- Interest payments are tax-deductible, reducing the overall cost of capital.
- The strong interest coverage ratio (9.93) indicates that DEF PLC can comfortably manage additional debt payments.
- The current gearing ratio (0.576) is moderate, allowing for sustainable borrowing.

2. Equity Financing to Maintain Financial Stability

- Issuing £45 million in new equity supports capital structure stability without excessively increasing debt levels.
- Attracting strategic investors through equity issuance can provide additional industry expertise and market positioning advantages.
- Helps maintain shareholder confidence by ensuring the debt-to-equity ratio remains balanced.

3. Mitigating Market Risks

- Avoiding excessive equity issuance prevents market overcorrection and protects shareholder value.
- Maintaining moderate debt levels reduces financial strain and ensures long-term sustainability.
- A 55%-45% debt-to-equity mix allows DEF PLC to leverage tax benefits of debt while controlling risk exposure.

3. Financing Decision

Conclusion

DEF PLC should raise £55 million through debt and £45 million through equity, ensuring a balanced and cost-effective capital structure. This approach optimizes tax benefits, minimizes dilution, and maintains financial stability while supporting future growth. By strategically leveraging both debt and equity financing, DEF PLC can preserve financial resilience and shareholder value while securing funding for its future projects.

This hybrid strategy effectively manages risk, enhances profitability, and ensures sustainable financial health, positioning DEF PLC for continued success in its growth initiatives.

4. APPENDIX

QUESTION 1 - APPENDIX

DEF PLC	
Already undertake cost (£) (Sunk cost)	3600000
Further development cost (£)	600000
Investment on plant and machinery (£)	15000000
Life(years)	6
Machinery resale (£)	1000000
Testing machinery (£) (Opportunity cost)	450000
Rent space(p.a)	100000
Fixed cost (£)	250000
Overhead (£)	10% of revenue
Selling price per unit (£)	55
Sales per annum for 1st year(units)	180000
Sales per annum for rest of year(units)	210000
Marketing cost (£)	200000
Direct manufacturing cost per unit (£)	26
Hold stock (%)	20
Rate of return(%)	14
Tax rate(%)	25
Staright line depriciation	-2333333.333

4. Appendix

Initial Investment Table		
Item		Amount (£)
Further development cost		600000
New plant & machinery		15000000
Opportunity cost of testing equipment		450000
Total Initial Investment		16050000

Sales Revenue Calculation Table							
Year		1	2	3	4	5	6
Units Sold		180000	210000	210000	210000	210000	210000
Selling Price (£)		55	55	55	55	55	55
Total Revenue (£)		990000 0	115500 00	115500 00	115500 00	115500 00	11550000

PROFIT & LOSS ACCOUNT							
Year	0	1	2	3	4	5	6
Revenues	-16050000	9900000	11550000	11550000	11550000	11550000	11550000
Direct Costs		-4680000	-5460000	-5460000	-5460000	-5460000	-5460000
Fixed Costs		-250000	-250000	-250000	-250000	-250000	-250000
Marketing	-200000						
Depreciation (Capital Allowances)		-2333333.333	-2333333.333	-2333333.3	-2333333.333	-2333333.333	-2333333.333
Resale (Capital Adjustment)							1000000
EBT	-16250000	2636666.667	3506666.667	3506666.7	3506666.667	3506666.667	4506666.667
Tax	0	-659166.6667	-876666.6667	-876666.67	-876666.6667	-876666.6667	-1126666.667
Profit after tax	-16250000	1977500	2630000	2630000	2630000	2630000	3380000

4. Appendix

CASH FLOW STATEMENT							
Year	0	1	2	3	4	5	6
Revenues (£)	-16050000	9900000	11550000	11550000	11550000	11550000	11550000
Direct Costs (£)		-4680000	-5460000	-5460000	-5460000	-5460000	-5460000
Fixed Costs (£)		-250000	-250000	-250000	-250000	-250000	-250000
Marketing (£)	-200000						
Resale (Capital Adjustment)							1000000
Cash flows	-16250000	4970000	5840000	5840000	5840000	5840000	6840000
Tax (£)	0	-659166.6667	-876666.6667	-876666.67	-876666.6667	-876666.6667	-1126666.6667
Net Cash Flow (NCF) (£)	-16250000	4310833.333	4963333.333	4963333.3	4963333.333	4963333.333	5713333.333
Present Value Coefficient (PVC)	1	0.877192982	0.769467528	0.6749715	0.592080277	0.519368664	0.455586548
Present Value of Cash Flows	-16250000	3781432.749	3819123.833	3350108.6	2938691.777	2577799.804	2602917.809
NPV	2820074.597						
IRR	20%						

Factor	Scenario	NPV (£)	IRR(%)
Selling Price	Base Case (£55/unit)	2820074.597	20
	Optimistic (+10%)	6080080.201	26
	Pessimistic (-10%)	-439931.0078	13
Sales Volume	Base Case (210,000 units)	2820074.597	20
	Optimistic (+10%)	4538986.643	23
	Pessimistic (-10%)	1101162.551	16

4. Appendix

QUESTION 2 - APPENDIX

Year	Expected Dividend Price(£)	Discount Factor	Present value of dividend (£)
0			
1	0.1	0.909090909	0.090909091
2	0.12	0.826446281	0.099173554
3	0.14	0.751314801	0.105184072
4	0.16	0.683013455	0.109282153
5	0.25	0.620921323	0.155230331
			0.5597792
Required Rate of Return	10%		
Selling Price (£)	4		
Growth after 6 years	4%		
Terminal Value (£)	4.333333333		
Prasent value of stock after 6 years	2.690659067		
Total value of the stock(£)	3.250438267		

4. Appendix

QUESTION 3 - APPENDIX

Appendix A: Consolidated Statement of Profit or Loss		
Item	2024 (GBP £m)	2023 (GBP £m)
Revenue	1,989	1,810
Operating Costs	-1,850	-1,701
Operating Profit	139	109
Finance Costs	-14	-13
Tax	-31	-24
Profit for the Year	94	72

4. Appendix

Appendix B: Consolidated Statement of Financial Position		
Category	2024 (GBP £m)	2023 (GBP £m)
Non-Current Assets		
Property, Plant & Equipment	530	510
Goodwill	91	91
Total Non-Current Assets	621	601
Current Assets		
Inventory	163	152
Receivables/Debtors	130	107
Bank	90	28
Total Current Assets	383	287
Total Assets	1004	889
Equity and Liabilities		
Equity		
Share Capital	100	100
Retained Earnings	386	310
Total Equity	486	410
Non-Current Liabilities		
Borrowings	280	260
Current Liabilities		
Payables/Creditors	214	201
Taxation	24	18
Total Current Liabilities	238	219
Total Equity and Liabilities	1004	889

4. Appendix

	2024 (GBP £m)	2023 (GBP £m)
Debt to equity ratio	0.576131687	0.634146341
Borrowings	280	260
Total Equity	486	410
Interest cover ratio	9.928571429	8.384615385
Operating Profit	139	109
Finance Costs	14	13
Return on equity	19.34156379	17.56097561
Profit for the Year	94	72
Total Equity	486	410