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STRATEGIC CFO CHALLENGE: SAVING A FAILING GLOBAL FIRM
Company: General Electronics
Industry: Consumer Electronics

INTRODUCTION

General Electronics is a multinational consumer electronics company that is currently facing declining profitability, liquidity pressures, and increasing financial risks. As the newly appointed Chief Financial Officer (CFO), the main responsibility is to assess the company's overall financial health, determine the underlying causes of its poor performance, and develop a sustainable turnaround strategy. This report examines the firm's financial statements over the past five years, focusing on profitability, liquidity, operating efficiency, gearing, and cash-flow performance. It also assesses the likelihood of financial distress using the Altman Z-Score model. Furthermore, the report recommends appropriate capital reforms and financial restructuring measures, and critically evaluates three proposed investment projects using established capital budgeting techniques. All recommendations are based on financial analysis and are consistent with ethical standards and global business practices.

SECTION 1: FINANCIAL HEALTH CHECK

1.1: Data Source and Analytical Framework

Financial health analysis is a fundamental responsibility of the chief financial officer, especially when an organization's performance is declining. This section analyzes the financial performance of General Electronics over the five-year period from 2020 to 2024, based on the consolidated income statement, statement of financial position, and statement of cash flows provided in the case materials.
Financial ratio analysis is used because it standardizes accounting statistics and identifies operational strengths and weaknesses, enabling meaningful comparisons over time (Atrill and McLaney, 2023). The analysis focuses on profitability, liquidity, efficiency, gearing, investment, and cash-flow ratios, which are supported by trend analysis. In addition, the Altman Z-score model is used to assess a company's risk of financial distress, an assessment that is particularly important for informing turnaround decisions (Altman, 1968).

1.2: Profitability Ratio Analysis

Profitability ratios assess how effectively a firm converts revenue and assets into profits, which reflects management's ability to create shareholder value (Ross et al., 2021). Continued declines often indicate managerial weaknesses and the risk of a growing financial crisis.

Key Profitability Ratios Analysis

1.2.1 : Gross Profit Margin (GPM)

It shows how efficiently a firm converts sales into profit after production costs, while declining margins indicate cost pressures or strong competition (Attrill and McLaney, 2023).
Formula :

$$\text{Gross Profit Margin (GPM)} = \frac{\text{Gross Profit}}{\text{Net Sales}} \times 100$$

For 2024 (£m):

Gross Profit = 113,994
Net Sales = 394,879
GPM = $\frac{113,994}{394,879}$ x 100 = 28.9%
For 2020(£m) :
Gross Profit = 176,256
Net Sales = 614,680
GPM = $\frac{176,256}{614,680}$ x 100 = 28.7%

Interpretation: Stable gross margins alongside falling sales indicate retained pricing power but weakening demand, likely due to competition and declining product relevance (Atrill and McLaney, 2023).

1.2.2: Operating Profit Margin (OPM)

Operating profit margin shows how efficiently a firm generates profit from core activities before interest and taxes (Ross et al., 2019).
Formula :
Operating Profit Margin (OPM) = $\frac{\text{Operating Profit}}{\text{Net Sales}}$ x 100
For 2024 (£m):
Operating Profit = -15,297
Net Sales = 394,879
OPM = $\frac{-15,297}{394,879}$ x 100 = -3.9%
For 2020(£m) :
Operating Profit = 37,267
Net Sales = 614,680
OPM = $\frac{37,267}{614,680}$ x 100 = 6.1%
Interpretation: A shift to negative operating margins indicates serious cost inefficiencies and an inability to adjust costs to declining revenues (Brely et al., 2022).

1.2.3: Net Profit Margin (NPM)

Net profit margin shows how much revenue remains as profit after all expenses, with declining margins indicating poor performance or rising costs (Attrill and McLaney, 2023).
Formula :
Net Profit Margin (NPM) = $\frac{\text{Net Income}}{\text{Net Sales}}$ x 100
For 2024(£m) :
Net Income = - 24,029
Net Sales = 394,879
NPM = $\frac{-24,029}{394,879}$ x 100 = - 6.1%
For 2020(£m) :
Net Income = 38,572
Net Sales = 614,680
NPM = $\frac{38,572}{614,680}$ x 100 = 6.2 %
Interpretation: Negative net margins reflect ongoing operating losses and financing costs, reducing shareholder value and eroding investor confidence.

1.2.4: Return on Assets (ROA)

ROA shows how efficiently a firm uses its assets to generate profit, whereas a decrease in ROA indicates poor utilization of assets and managerial inefficiency (Atrill and McLaney, 2023).
Formula :

Return on Assets (ROA) = $\frac{\text{Net Income}}{\text{Total Assets}}$ x 100

For 2024(£m) :
Net Income = - 24,029
Total Assets = 323,354

ROA = $\frac{-24,029}{323,354}$ x 100 = - 7.4%

For 2020(£m):
Net Income = 38,572
Total Assets = 510,290

ROA = $\frac{38,572}{510,290}$ x 100 = 7.5%

Interpretation: The sharp decline in ROA from 7.5% to -7.4% indicates value destruction and inefficient resource utilization, which requires urgent restructuring.

1.2.5: Return on Equity (ROE)

ROE shows the return earned on shareholders' capital, whereas negative ROE indicates a loss to shareholders (Brealey et al., 2022).
Formula :

Return on equity (ROE) = $\frac{\text{Net Income}}{\text{Shareholders Equity}}$ x 100

For 2024(£m) :
Net Income = - 24,029
Shareholders Equity = 153,105

ROE = $\frac{-24,029}{153,105}$ x 100 = - 15.7%

For 2020(£m) :
Net Income = 38,572
Shareholders Equity = 313,301

ROE = $\frac{38,572}{313,301}$ x 100 = 12.31%

Interpretation: The decline in ROE from 12.31% to -15.7% reflects the significant destruction of shareholder value, caused by declining profits and increasing leverage.

1.3 Liquidity Ratio Analysis

Liquidity ratios measure the firm’s ability to meet short-term liabilities. Weak liquidity increases the risk of payment delays, supplier pressure, and operational disruption (Ross et al., 2021).

Key ratios:

1.3.1: Current Ratio

The current ratio measures a firm's ability to meet short-term obligations using its current assets. It indicates the firm's overall short-term financial health (Atrill and McLaney, 2023).
Formula :

Current Ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$

For 2024(£m) :

Current Ratio = $\frac{242,494}{158,291}$ = 1.53

For 2020(£m) :

Current Ratio = $\frac{326,843}{179,510}$ = 1.82

Interpretation:

The decline in the current ratio indicates weakening short-term financial resilience. Although the ratio remains above 1, the downward trend indicates increasing liquidity pressures.

1.3.2: Quick Ratio

The quick ratio is a more conservative liquidity measure that assesses a firm's ability to pay short-term liabilities using its most liquid assets, excluding inventory (Brigham and Ehrhardt, 2022).

Formula :

Quick Ratio = $\frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$

For 2024 (£m) :

Current assets = 242,494

Inventory = 79,355

Current liabilities = 158,291

Quick Ratio = $\frac{242,494 - 79,355}{158,291}$ = 1.03

For 2020(£m) :

Current assets = 326,843

Inventory = 120,430

Current liabilities = 179,510

Quick Ratio = $\frac{326,843 - 120,430}{179,510}$

= 1.15

Interpretation: A rapid decline in the ratio from 1.15 to 1.03 indicates weakness in liquidity and increased liquidity risk, which requires improved working capital management (Ross et al., 2021).

1.4 : Efficiency Ratio Analysis

The efficiency ratio assesses how effectively a firm manages its working capital components. Poor efficiency often leads to cash flow shortfalls and higher financing costs (Ross et al., 2021).

Key ratios:

1.4.1: Inventory Days

Inventory days show how long a company holds stock before selling it, which indicates the efficiency of inventory management (Atrill and McLaney, 2023).

Formula

Inventory Days = $\frac{\text{Inventory}}{\text{Cost of Sales}}$ × 365

For 2024(£m):

Inventory = 79,355

Cost of sales = 280,885

Inventory Days = $\frac{79,355}{280,885}$ × 365

= 103.2 days

Interpretation : In the case of inventory periods exceeding 100 days, stock movements slow down, cash accumulation and liquidity become weak.

1.4.2: Receivables Days

Receivables Days shows how long it takes a firm to collect cash from credit customers, indicating the effectiveness of its credit and collection policies (Ross et al., 2021).

Formula:

$$\text{Receivables Days} = \frac{\text{Trade Receivables}}{\text{Revenue}} \times 365$$

For 2024(£m):

Trade receivables = 114,182

Revenue = 394,879

$$\text{Receivables Days} = \frac{114{,}182}{394{,}879} \times 365$$

= 105.5 days

Interpretation Receivables: over 105 days indicate delayed cash flow, increasing liquidity pressure, and financial risk.

1.4.3:Payables Days

Days payable measures how long it takes a company to pay its suppliers. Prolonged payment periods improve short-term liquidity but can indicate cash flow stress and, if excessive, can damage supplier relationships (Arnold, 2023).

Formula

$$\text{Payables Days} = \frac{\text{Accounts Payable}}{\text{Cost of Sales}} \times 365$$

For 2024(£m):

Cost of sales = 280,885

Accounts payable = 72,031

Calculation

$$\text{Payables Days} = \frac{72{,}031}{280{,}885} \times 365$$

= 0.2564 × 365

= 93.6 = 94days

Interpretation: A payable period of around 94 days shows delayed payments to suppliers, which temporarily supports liquidity but indicates cash flow pressures and potential supplier relationship risks.

1.4.4: Total Asset Turnover

The asset turnover ratio shows how efficiently assets generate revenue; a decrease indicates poor utilization of assets, poor profitability, and cash flow (Arnold, 2023).

Formula

$$\textbf{Total Asset Turnover} = \frac{\textbf{Net Sales}}{\textbf{Total Assets}}$$

For 2024(£m):

$$\textbf{Total Asset Turnover} = \frac{\mathbf{394{,}879}}{\mathbf{323{,}354}} = 1.22$$

Interpretation: Asset turnover of 1.22 times shows slight efficiency, but declining profits indicate that assets are not generating sustainable returns.

1.5: Gearing Ratios

The gearing ratio measures the level of financial risk arising from debt financing. Excessive leverage increases vulnerability during periods of declining earnings (Brealey et al., 2022).

1.5.1: Debt-to-Equity Ratio

The debt-to-equity ratio shows how much a firm relies on debt compared to shareholders' equity, which indicates its financial risk and capital structure (Ross et al., 2021).

Debt-to-Equity = $\frac{\text{Total Liabilities}}{\text{Shareholders' Equity}}$

2024 Calculation(£m):

Debt-to-Equity = $\frac{170{,}249}{153{,}105}$ = 1.11

Interpretation : This institution relies heavily on debt financing, limiting financial flexibility and increasing the risk of defaulted loans.

1.5.2: Interest Coverage Ratio

The interest coverage ratio shows a firm's ability to pay interest from operating profits, indicating its short-term solvency and debt-service capacity (Brigham and Ehrhardt, 2022).

Interest Coverage = $\frac{\text{Operating Profit}}{\text{Interest Expense}}$

2024 Calculation(£m):

Interest Coverage = $\frac{-15{,}297}{3{,}361}$ = - 4.55

Interpretation: Negative interest coverage confirms that the firm is unable to repay debt from operating income, which is an important warning sign.

1.6: Investment Performance Ratios

Investment performance ratios assess how effectively a firm generates returns for shareholders, reflecting profitability, market confidence, and overall financial performance (Arnold, 2023).

Key Investment Performance Ratios

1.6.1: Earnings per Share (EPS)

Earnings per share (EPS) indicates profit or loss per common share, which reflects shareholder value and profitability (Ross et al., 2021).

EPS = $\frac{\text{Net Income}}{\text{Number of ordinary shares}}$

For 2024(£m):

EPS = $\frac{-24{,}029}{12{,}959}$ = -1.85

For 2020(£m):

EPS = $\frac{38{,}572}{13{,}893}$ = 2.78

Interpretation: The decline in EPS from £2.78 to –£1.85 indicates a sharp decline in profitability, indicating financial distress and the need for urgent restructuring.

1.7 Cash Flow Performance

Cash flow performance shows how well a firm generates and uses cash to meet operating needs, repay debt, and support investments, indicating its overall liquidity and financial stability (Ross et al., 2021).
Net cash from operating activities (OCF) = £14,822
Net sales (Revenue) = £394,879

1.7.1: Operating Cash Flow Margin (OCF Margin)

Operating cash flow margin measures how efficiently a firm converts revenue into operating cash (Ross et al., 2021).

$$\text{OCF Margin} = \frac{\text{Operating Cash Flow}}{\text{Revenue}} \times 100$$

For 2024(£m):

$$\text{OCF Margin} = \frac{14{,}822}{394{,}879} \times 100 = 3.8\%$$

Interpretation : An operating cash flow margin of around 3.8% indicates weak cash generation from core activities, which limits the firm's ability to fund operations internally and increases reliance on external financing (Ross et al., 2021).

1.8: Corporate Failure Prediction: Altman Z-Score

The original Altman Z-score (1968) uses multiple discriminant analysis to distinguish bankrupt and non-bankrupt firms based on financial ratios.However, because sales intensity and asset structure differ significantly outside of traditional manufacturing, Altman later introduced Z-scores, specifically designed for the following:
General firms
Non-manufacturing firms
International and emerging-market corporations
This makes the Z-score particularly suitable for General Electronics, which operates in the global consumer electronics sector.

1.8.1: Altman Z″-Score Formula (Non-Manufacturing Firms)

$Z'' = 6.56X_1 + 3.26X_2 + 6.72X_3 + 1.05X_4$
Financial Data Used 2024 (£m)

$$X_1 = \frac{\text{Working Capital}}{\text{Total Assets}} = \frac{\text{Current Assets} - \text{Current Liabilities}}{\text{Total Assets}} = \frac{242{,}494 - 158{,}291}{323{,}354} = 0.260$$

$$X_2 = \frac{\text{Total Equity}}{\text{Total Assets}} = \frac{153{,}105}{323{,}354} = 0.474$$

$$X_3 = \frac{\text{EBIT}}{\text{Total Assets}} = \frac{-15{,}297}{323{,}354} = -0.047$$

$$X_4 = \frac{\text{Total Equity}}{\text{Total Liabilities}} = \frac{153{,}105}{170{,}249} = 0.899$$

Here, $Z'' = 6.56X_1 + 3.26X_2 + 6.72X_3 + 1.05X_4$
$= 6.56(0.260) + 3.26(0.474) + 6.72(-0.047) + 1.05(0.899)$
$= 3.88$ (app.)

Interpretation : Although the Altman Z-score places the firm in a statistically safe zone, this result should still be interpreted with caution because of persistent operating losses , negative EBIT ,and declining liquidity ,which are not fully captured by the model.

SECTION 2 : WORKING CAPITAL MANAGEMENT ANALYSIS

Working capital management is concerned with controlling current assets and current liabilities to ensure adequate liquidity by minimizing the cost of capital (Attrill and McLaney, 2022). Poor working capital discipline is a common cause of corporate crises, especially in capital-intensive industries such as consumer electronics where the risk of inventory obsolescence is high (Ross et al., 2021).

2.1: Cash Operating Cycle

The key analytical tool is the Cash Operating Cycle (COC), also called the Cash Conversion Cycle (CCC):
COC = Days Inventory Outstanding (DIO) + Days Sales Outstanding (DSO) - Days Payables Outstanding (DPO)
Long cycles indicate that cash is tied up in operations for a long time, which increases reliance on external financing (Brealey, Myers & Allen, 2023).

2.1.1: Days Inventory Outstanding (DIO)

DIO measures how long inventory is held before being sold. High DIO reflects slow inventory levels, poor demand forecasting, or excessive product complexity (Atrill & McLaney, 2022).

$$DIO = \left(\frac{\text{Inventory}}{\text{Cost of Sales}}\right) \times 365$$

2024 Data (£m)
Inventory = 79,355
Cost of sales = 280,885

$$DIO = \left(\frac{79{,}355}{280{,}885}\right) \times 365. = 103.2 \text{ days}$$

Interpretation: A DIO of over 100 days is extremely high for consumer electronics, indicating an increased risk of overstocking and obsolescence.

2.1.2: Days Sales Outstanding (DSO)

DSO measures the average time it takes to collect cash from customers. Poor receivables control increases liquidity risk and credit losses (Ross et al., 2021).

$$DSO = \left(\frac{\text{Accounts Receivable}}{\text{Net Sales}}\right) \times 365$$

2024 Data (£m):
Accounts receivable = 114,182
Net sales = 394,879

$$DSO = \left(\frac{114{,}182}{394{,}879}\right) \times 365 = 105.5 \text{ days}$$

Interpretation: Customers pay for more than three months, indicating a weak credit chain or reliance on large distributors with strong bargaining power.

2.1.3: Days Payables Outstanding (DPO)

DPO reflects how long it takes a firm to pay suppliers. Delaying payments increases liquidity, but excessive delays can damage supplier relationships (Brealey, Myers & Allen, 2023).

$$DPO = \left(\frac{\text{Accounts Payable}}{\text{Cost of Sales}}\right) \times 365$$

2024 Data (£m):
Accounts payable = 72,031

Cost of sales = 280,885

DPO = $\left(\frac{72,031}{280,885}\right) \times 365 = 93.7$ days

Interpretation: Although relatively high, DPO has also decreased compared to previous years, indicating a reduction in supplier credit leverage.

2.1.4 : Cash Operating Cycle (COC)

COC = DIO + DSO - DPO
= 103.2 + 105.5 - 93.7
= 114.9 days

General Electronics finances about four months of internal operations before recovering cash, which explains the continued reliance on revolving credit facilities.

2.2: Liquidity Implications

According to the pecking order theory, firms prefer internal financing, then debt, and finally equity (Myers, 1984). However, General Electronics' increased COC forced them to rely heavily on short-term debt:

Cash fell from £66,740 million (2022) to £26,783 million (2024)

Net losses continued despite positive operating cash flow driven by non-cash items

This discrepancy between accounting profit and cash generation reflects working capital inefficiency rather than purely operational weakness.

2.3: Working Capital Improvement Strategies

General Electronics can improve its working capital position by tightening debt controls, reducing receivables, optimizing inventory levels through demand forecasting, and negotiating long-term payment terms with suppliers. These steps will shorten the cash conversion cycle, improve liquidity, and reduce reliance on short-term financing.

2.3.1: Inventory Reduction

Just-in-time (JIT) and lean inventory models reduce holding costs and eliminate cash (Heizer, Render & Munson, 2020).

Target

Reduce DIO from 103 to 80 days.

Cash released $\approx \frac{23}{365} \times 280,885 \approx$ £17,699.7m

2.3.2: Receivables Management

Trade credit should be aligned with customer risk profiles and enforced through centralized credit controls (Atrill and McLaney, 2022).

Target

Reduce DSO by 15 days.

Cash released $\approx \frac{15}{365} \times 394,879 \approx$ £16,228m

2.3.3 Payables Optimisation

Supply chain finance allows firms to extend payment terms without harming suppliers (Ross et al., 2021).
Target
Increase DPO by 7 days.
Liquidity gain $\approx \frac{7}{365} \times 280{,}885 \approx$ £5386.9m

2.4: Short-Term vs Long-Term Financing

Aspect	Short-Term Finance	Long-Term Finance
Cost	Lower initially	Higher
Risk	High refinancing risk	Lower rollover risk
Suitability	Seasonal WC needs	Structural turnaround
Theory	Aggressive WC policy	Conservative WC policy

(Atrill & McLaney, 2022)
Due to the structural nature of General Electronics' working capital problem, long-term financing will require the use of short-term debt as the primary funding source, rather than short-term debt, with short-term debt being used only strategically.

SECTION 3. Strategic Financial Restructuring Plan

General Electronics should implement a financial restructuring strategy focused on improving liquidity and reducing financial risk. This includes investing in non-core assets to generate cash, restructuring or refinancing debt to reduce interest burden, and increasing equity financing to strengthen the balance sheet. In addition, improved working capital management will help increase cash flow and maintain long-term financial stability.

3.1 Rationale for Financial Restructuring

General Electronics has experienced a sustained deterioration in financial performance over the past five years, marked by declining revenues, persistent operating losses, weakening cash flow, and erosion of shareholder value. In 2024, the firm reported a net income (loss)of £24,029m and negative earnings per share of -1.85, compared to positive EPS of £2.78 (follow 1.6.1) in 2020. This downward trajectory signals serious financial distress and increases default risk (Atrill and McLaney, 2023). Liquidity and leverage pressures make the need for restructuring more plausible. Total liabilities of £170,249 million in 2024 exceed shareholders' equity of £153,105 million, indicating a leveraged capital structure and limited financial flexibility. Furthermore, the operating cash flow margin is only 3.75% (£14,822 million ÷ £394,879 million), indicating weak internal cash generation and overreliance on external financing (Ross et al., 2021). Against this backdrop, a comprehensive financial restructuring plan is essential to restore solvency, protect shareholder value and enable long-term sustainability.

3.2 Recommended Financial Restructuring Options

3.2.1 Divestiture of Non-Core Assets

The firm's asset turnover ratio of approximately 1.22 times (revenue £394,879 million ÷ total assets £323,354 million) indicates inefficient use of a large asset base. This inefficiency is exacerbated by impairment charges and declining profitability, which indicate that some assets are of poor quality.

Selective investment in non-core or low-return business units will free up leverage, improve cash flow, and allow management to refocus on core consumer electronics segments with strong margins. The proceeds from the investment can be used to reduce debt, thereby reducing financial risk and interest burden (Arnold, 2023).

3.2.2 Equity Injection / Recapitalisation

Given the continuing losses and declining EPS, equity injections are crucial to stabilize the balance sheet. The current leverage position (debt-to-equity ≈ 1.11) limits borrowing capacity and increases the risk of economic shocks. Raising new equity through a rights issue or strategic equity partner would strengthen the capital base, restore lender confidence, and reduce reliance on short-term credit lines.
While equity issuance may weaken existing shareholders in the short term, it increases long-term shareholder value by reducing the risk of bankruptcy and supporting future growth opportunities (Ross et al., 2021).

3.2.3 Debt Restructuring and Refinancing

General Electronics relies heavily on lines of credit, with £36,960m outstanding in 2024. Weak operating cash flow limits the firm's ability to service its debt. Debt restructuring - such as extending maturities, renegotiating interest rates, or converting some of the debt into equity - will reduce short-term liquidity pressures and improve cash flow forecasting.

Reducing debt servicing costs will directly increase operating flexibility, which will allow for reinvestment in innovation, supply chain efficiencies, and digital transformation, which are critical in the competitive consumer electronics industry (Attrill and McLaney, 2023).

3.2.4 Strategic Merger or Alliance

A merger or strategic alliance with a financially strong global electronics company can create operational synergies, cost savings, and access to new technologies and markets. Shared research and development, purchasing efficiencies, and economies of scale can improve margins and revenue stability. However, any merger must be carefully evaluated to ensure cultural fit and alignment with long-term strategic objectives.

3.3 Impact on Shareholder Value, Debt Structure, and Operational Flexibility

Shareholder value:
While investments and equity injections may initially reduce earnings, they reduce bankruptcy risk and create a more sustainable earnings base. Improved capital structure and the prospect of restored profitability can increase investor confidence and long-term valuation.

Debt structure:
Repayment of debt using investment proceeds and refinancing will reduce leverage and interest burden. A more balanced debt-equity mix reduces financial risk and improves creditworthiness, enabling access to capital at lower cost.

Operational flexibility:
Reduced debt service obligations and improved liquidity provide management with greater strategic flexibility. This allows for reinvestment in core activities, product innovation, and market expansion, supporting long-term competitiveness (Arnold, 2023).

3.4 International and Ethical Considerations

Taxation and Regulatory Issues
As a global organization, restructuring decisions should be considered for cross-border tax implications. Demergers and mergers may trigger capital gains taxes and regulatory approvals in different jurisdictions. Effective tax planning must be consistent and transparent to avoid reputational risks.

Currency Risk and Inflation
International operations expose General Electronics to foreign exchange volatility. Currency matching between cash flows and liabilities should be considered to reduce exchange rate risk when refinancing debt. Additionally, inflationary pressures increase input costs, further reinforcing the need for efficiency-driven restructuring (Ross et al., 2021).

Corporate Social Responsibility (CSR)
In principle, restructuring should consider employee welfare, supplier relations, and environmental responsibility. Divestitures and cost reductions should be managed responsibly through fair labor practices and clear communication with stakeholders. Maintaining CSR commitments supports brand reputation and long-term stakeholder trust (Atrill and McLaney, 2023).

Ultimately, a combined strategy of asset sales, equity injections, debt restructuring, and selective strategic partnerships provides the most effective turnaround path for General Electronics. These steps are firmly based on the financial evidence of the firm's declining profitability, weak cash flow, and leveraged capital structure. By restoring financial stability, improving operational efficiency, and addressing international and ethical considerations, the proposed restructuring plan positions the firm for sustainable recovery and long-term value creation.

Section 4 Investment Appraisal and Capital Budgeting

Investment evaluation is crucial for financially distressed firms, as poor capital allocation can exacerbate liquidity pressures and threaten survival. Since General Electronics has experienced declining profits, weak cash flows, and increasing leverage, only those projects that increase value, stabilize cash flows, and reduce risk should be undertaken. This section assesses three proposed investment projects using the payback period, accounting rate of return, net present value, profitability index, and internal rate of return.A final decision is made under capital rationing constraints (£60 million), which is consistent with the firm's fragile financial condition (Ross et al., 2021).

4.1: Project Cash Flow Summary

Project	Initial Investment (£m)	Year 1	Year 2	Year 3	Year 4	Year 5
A	40	10	12	14	10	8
B	30	6	6	6	6	6
C	50	5	10	20	25	15

Discount rate = 10%
Depreciation = Straight-line to zero

4.2 Payback Period (PBP)

The payback period is a capital budgeting technique that measures the time required to recover a project's initial investment, which comes from its net cash flow(Atrill and McLaney, 2023).
Formula

Payback Period = Years before recovery + $\frac{\text{Unrecovered cost}}{\text{Cash inflow in next year}}$

Calculations
Project A (£40m)
Cumulative inflows:
Year 1: 10
Year 2: 22
Year 3: 36
Year 4: 46

Payback = 3 + $\frac{\mathbf{40 - 36}}{\mathbf{10}}$ = 3.4 years

Project B (£30m)
Cumulative inflows:
Year 5 = £30m
Payback = 5 years

Project C (£50m)
Cumulative inflows:
Year 1–3 = £35m

Year 4 = £60m

Payback = 3 + $\frac{50 - 35}{25}$ = 3.6 years

Interpretation: The payback period results show that Project A recovers its initial investment the fastest (3.4 years), making it the most attractive option in terms of liquidity. This is particularly important given 'General Electronics' liquidity pressures, as a faster recovery reduces financial risk (Atrill and McLaney, 2023). Project C also has a relatively shorter payback period (3.6 years), while Project B is the least attractive with a payback period of five years.

4.3 Accounting Rate of Return (ARR)

The accounting rate of return measures the profitability of an investment by comparing the average accounting profit to the average investment (Atrill and McLaney, 2020).

Formula

ARR = $\frac{\text{Average annual profit}}{\text{Average investment}}$ × 100

Calculations

Project A

- Total inflows = £54m
- Depreciation = £40 ÷ 5 = £8m
- Average profit = (54 − 40) ÷ 5 = £2.8m
- Average investment = £20m

ARR = $\frac{2.8}{20}$ × 100 = 14%

Project B

- Total inflows = £30m
- Average Profit = £0

ARR = 0%

Project C

- Total inflows = £75m
- Depreciation = £10m
- Average profit = (75 − 50) ÷ 5 = £5m
- Average investment = £25m

ARR = $\frac{5}{25}$ × 100 = 20%

Interpretation: The ARR results indicate that Project C generates the highest return (20%), followed by Project A (14%), while Project B generates no return. However, ARR ignores the timing and risk of cash flows, so these results should be interpreted with caution (Arnold, 2023).

4.4 Net Present Value (NPV)

Net present value is the difference between the present value of expected future cash flows and the present value of the initial investment (Atrill and McLaney, 2020).

Formula

NPV = PV - Initial Investment

PV = $\sum \frac{\text{CF}}{(1+r)^n}$

Discount Factors at 10%

- Year 1: 0.909,
- Year 2 : 0.826,
- Year 3 : 0.751,
- Year 4 : 0.683,
- Year 5 : 0.621

NPV Calculations

Project A
PV = (10×0.909)+(12×0.826)+(14×0.751)+(10×0.683)+(8×0.621)
= 41.31
NPV = 41.31 - 40 = +£1.31m

Project B
PV = 6×(0.909+0.826+0.751+0.683+0.621)
= 22.75
NPV = 22.75 - 30 = - 7.25m

Project C
PV = (5×0.909)+(10×0.826)+(20×0.751)+(25×0.683)+(15×0.621)
= 4.55+8.26+15.02+17.08+9.32 = 54.23

NPV = 54.23 - 50 = +£4.23 m
Interpretation: The NPV results indicate that Projects A (£1.31m) and C (£4.23m) generate positive net present values and thereby create shareholder value. In contrast, Project B has a negative NPV (–£7.25m), indicating that it will reduce shareholder wealth and should be rejected. Consequently, based on the NPV criteria, Project C is the most financially attractive alternative, as it provides the highest value creation (Ross et al., 2021).

4.5 Profitability Index (PI)

The profitability index is the ratio of a project's initial investment to the present value of future cash flows (Atrill and McLaney, 2020).
Formula
$$PI = \frac{\text{PV of inflows}}{\text{Initial investment}}$$

Project A
$$PI = \frac{41.31}{40} = 1.03$$

Project B
$$PI = \frac{22.75}{30} = 0.76$$
Project C
$$PI = \frac{54.23}{50} = 1.08$$
Interpretation: The profitability index results show that projects A (PI = 1.03) and C (PI = 1.08) are acceptable because their PI values exceed 1, indicating value creation. Project C provides the highest value per pound invested, making it the most attractive alternative, especially under capital rationing conditions. In contrast, project B (PI = 0.76) should be rejected because it destroys value (Arnold, 2023).

4.6 Internal Rate of Return (IRR)

The internal rate of return is the discount rate that makes the present value of a project's future cash flows equal to its initial investment, resulting in a net present value of zero (Atrill and McLaney, 2020). IRR is the discount rate at which NPV = 0.

Project A

Discount Factors at 10%

NPV = + 1.31 (positive)

Discount Factors at 12% (approx)

PV = (10×0.892)+(12×0.797)+(14×0.711)+(10×0.635)+(8×0.567)

= 39.4

NPV` = 39.4 – 40 = - 0.6 (Negative)

IRR = 10% + $\frac{1.31}{1.31+0.6}$ × (12%-10%) ~11.3%

Project B

Discount Factors at 10%

NPV = - 7.25m (Negative)

- Total cash inflows = £30m
- Initial investment = £30m
- Time value of money makes the return effectively zero or slightly negative.

Project C

Discount Factors at 10%

- NPV = +£4.23 m

Discount Factors at 15% (approx)

PV = £49.2 m

NPV` =49.2 – 50 = - 0.8 (Negative)

IRR = 10% + $\frac{4.23}{4.23+0.8}$ × (15%-10%) ~14.2%

Interpretation: The IRR analysis shows that projects A (≈11.3%) and C (≈14.2%) generate returns above 10% of the cost of capital, indicating that both projects are financially viable. In contrast, project B fails to achieve the minimum required return, as its NPV is negative, meaning that the IRR is close to zero. Therefore, based on the IRR criteria, projects A and C should be accepted, while project B should be rejected (Ross et al., 2021).

4.7 Capital Rationing Decision (£60m Limit)

Combination	Investment (£m)	Total NPV (£m)
A only	40	1.31
C only	50	4.23
A + B	70	Not allowed
B + C	80	Not allowed
A + C	90	Not allowed

- Optimal Decision

Project C only (£50m)

- Highest NPV

- Highest PI
- Leaves £10m liquidity buffer

4.8 Risk and Financial Context Justification

Recent performance of general electronics shows reduced profits, poor operating cash flows and strict liquidity. Project C's back-loaded but large cash flow carries high time risks, yet supports its higher NPV and IRR selection. Project A, while safe, creates a limited price. The stable cash flow in Project B is insufficient to meet the cost of capital and will worsen the financial crisis.
In terms of the firm's fragile cash position, choosing a high-value project rather than multiple marginal projects reduces financial stress and saves operational flexibility (Atrill and McLaney, 2023).

4.9 Final Recommendation

Under capital rationing and financial distress, Project C should be accepted, while Projects A and B should be rejected. Project C maximizes shareholder value, exceeds the cost of capital, and provides the strongest long-term strategic advantage despite high cash flow volatility. This sound investment decision supports the firm's changing objectives and financial sustainability.

Conclusion

Overall, the financial analysis reveals a firm experience significant operational and liquidity challenges , despite recording a strong Altman Z”- Score. While the statistical model indicates a low immediate bankruptcy risk , ratio analysis and cash flow trends suggest mounting financial pressure driven by weak profitability , inefficient working capital management , and declining liquidity . The proposed financial restructuring measures and the selection of Project C under capital rationing are therefore justified ,as they prioritise value maximisation while preserving liquidity . Without timely restructuring and operational improvements , the firm’s current financial trajectory may become unsustainable in the medium term.

References

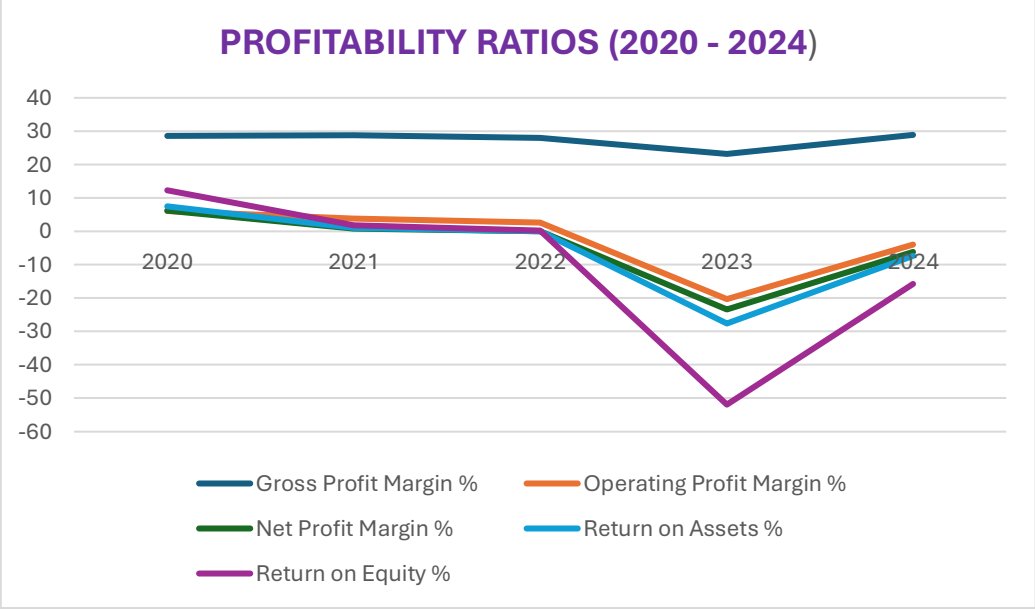
- Arnold, G. (2023) Corporate Financial Management. 6th edn. Harlow: Pearson Education. Available at:https://www.pearson.com/en-gb/subject-catalog/p/corporate-financial-management/P200000006246/9781292430251
- Atrill, P. and McLaney, E. (2020) Financial management for decision makers. 9th edn. Harlow: Pearson Education Limited. Available at:https://www.pearson.com/uk/educators/higher-education-educators/program/Atrill-Financial-Management-for-Decision-Makers-9th-Edition/PGM334561.html
- Atrill, P. and McLaney, E. (2022) Accounting and Finance for Non-Specialists. 12th edn. Harlow: Pearson.Available at: https://www.pearson.com/en-gb/subject-catalog/p/accounting-and-finance-for-non-specialists/P200000007388
- Atrill, P. and McLaney, E. (2023) Accounting and Finance for Non-Specialists. 12th edn. Harlow: Pearson Education. Available at: https://www.pearson.com/en-gb/subject-catalog/p/accounting-and-finance-for-non-specialists/P200000006087/9781292435072
- Atrill, P. and McLaney, E. (2023) Financial Accounting for Decision Makers. 10th edn. Harlow: Pearson Education. Available at: https://www.pearson.com/en-gb/subject-catalog/p/financial-accounting-for-decision-makers/P200000003284
- Brealey, R.A., Myers, S.C. and Allen, F. (2022) Principles of Corporate Finance. 14th edn. New York: McGraw-Hill.Available at: https://www.mheducation.com
- Brealey, R.A., Myers, S.C. and Allen, F. (2023) Principles of Corporate Finance. 14th edn. New York: McGraw-Hill.Available at: https://www.mheducation.com/highered/product/principles-corporate-finance-brealey/M9781260565553.html
- Brigham, E.F. and Ehrhardt, M.C. (2022) Financial Management: Theory and Practice. 16th edn. Boston: Cengage Learning. Available at: https://www.cengage.uk/c/financial-management-theory-and-practice-16e-brigham/
- Heizer, J., Render, B. and Munson, C. (2020) Operations Management. 13th edn. Harlow: Pearson.Available at: https://www.pearson.com/en-gb/subject-catalog/p/operations-management/P200000007301
- Myers, S.C. (1984) 'The capital structure puzzle', Journal of Finance, 39(3), pp. 575–592.Available at: https://doi.org/10.1111/j.1540-6261.1984.tb03646.x
- Ross, S.A., Westerfield, R.W. and Jordan, B.D. (2021) Fundamentals of Corporate Finance. 13th edn. New York: McGraw-Hill.Available at:https://www.mheducation.com/highered/product/fundamentals-corporate-finance-ross/M9781260013962.html
- Ross, S.A., Westerfield, R.W., Jaffe, J. and Jordan, B.D. (2021) Corporate Finance. 13th edn. New York: McGraw-Hill Education. Available at: https://www.mheducation.com/highered/product/corporate-finance-ross/M9781260565553.html
- Ross, S.A., Westerfield, R.W., Jaffe, J.F. and Jordan, B.D. (2019) Corporate Finance. 12th edn. New York: McGraw-Hill Education. Available at: https://www.mheducation.com/highered/product/corporate-finance-ross/M9781260565553.html

APPENDICES

APPENDIX A TABLE : PROFITABILITY RATIOS (2020–2024)

Ratio	2020	2021	2022	2023	2024
Gross Profit Margin %	28.7	28.8	28.1	23.2	28.9
Operating Profit Margin %	6.1	3.9	2.7	-20.3	-3.9
Net Profit Margin %	6.2	0.9	0.1	-23.4	-6.1
Return on Assets %	7.5	1	0.1	-27.6	-7.4
Return on Equity %	12.3	1.9	0.2	-51.9	-15.7

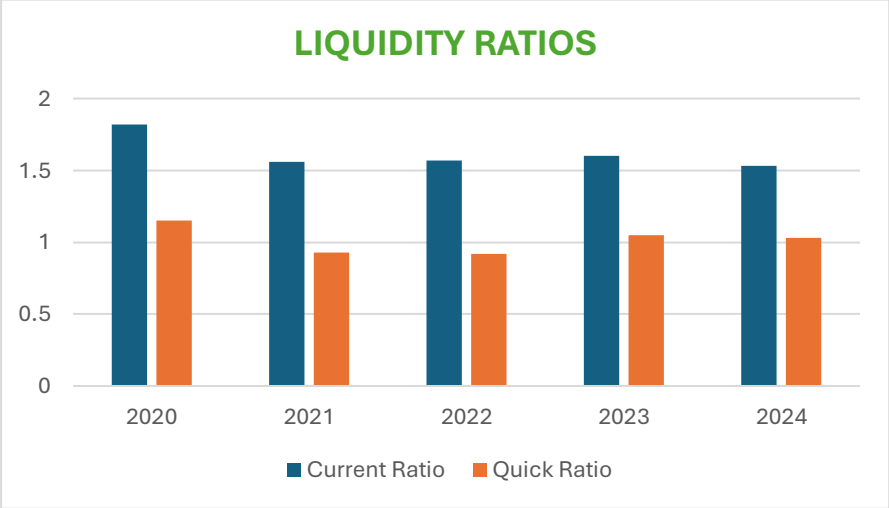
GRAPH A:



APPENDIX B: LIQUIDITY RATIOS

Ratio	2020	2021	2022	2023	2024
Current Ratio	1.82	1.56	1.57	1.6	1.53
Quick Ratio	1.15	0.93	0.92	1.05	1.03

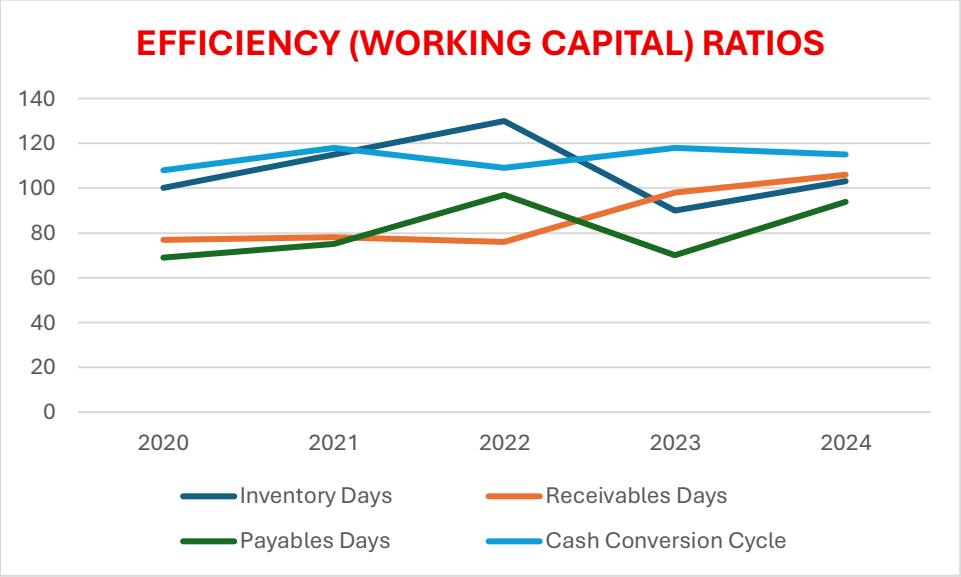
GRAPH B:



APPENDIX C: EFFICIENCY (WORKING CAPITAL) RATIOS

Ratio (Days)	2020	2021	2022	2023	2024
Inventory Days	100	115	130	90	103
Receivables Days	77	78	76	98	106
Payables Days	69	75	97	70	94
Cash Conversion Cycle	108	118	109	118	115

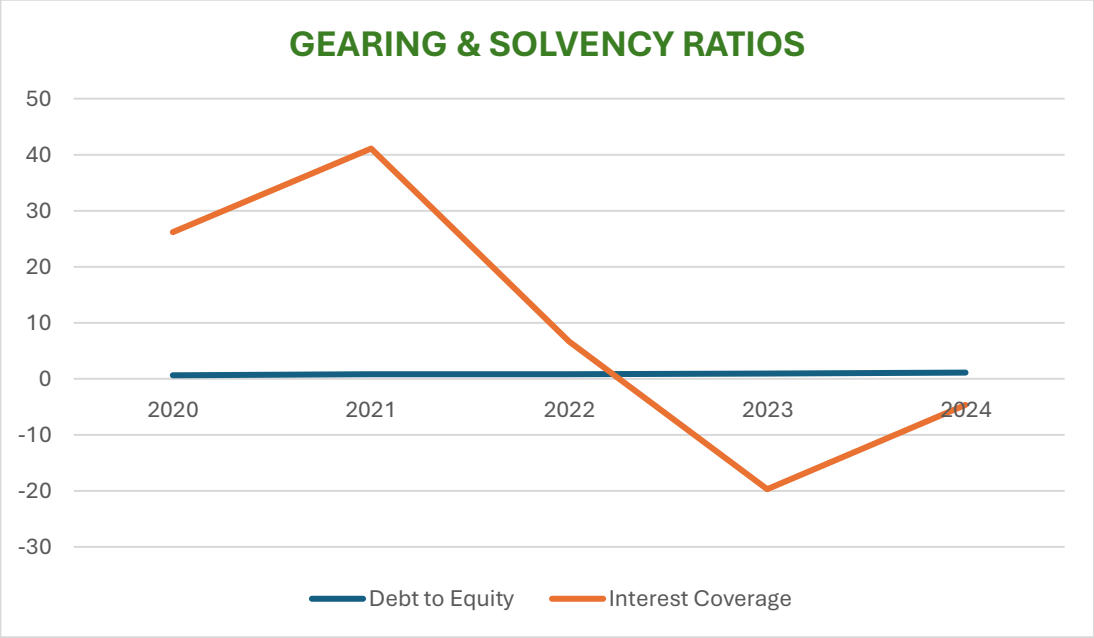
GRAPH C:



APPENDIX D: GEARING & SOLVENCY RATIOS

Ratio	2020	2021	2022	2023	2024
Debt to Equity	0.63	0.86	0.88	0.99	1.11
Interest Coverage	26.2	41.1	6.6	-19.7	-4.6

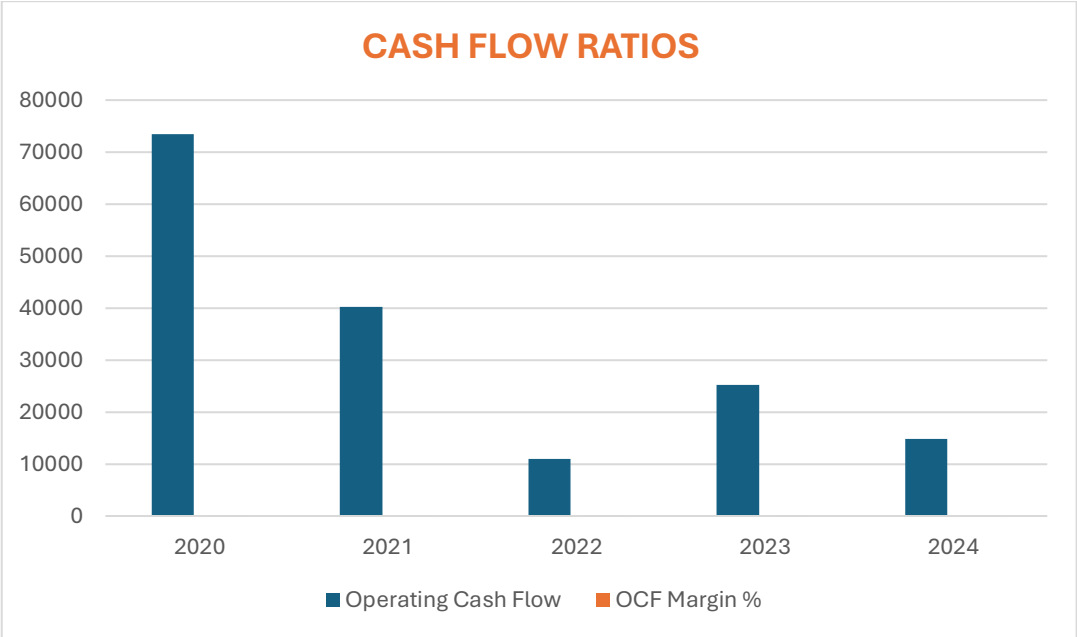
GRAPH D:



APPENDIX E: CASH FLOW RATIOS

Metric	2020	2021	2022	2023	2024
Operating Cash Flow	73392	40283	10926	25190	14822
OCF Margin %	11.9	6.7	2	6	3.8

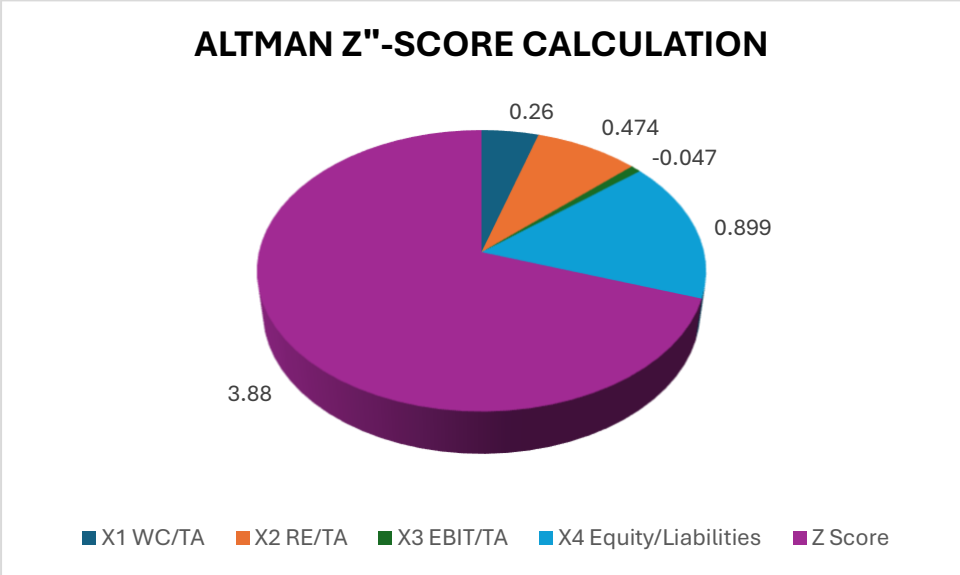
GRAPH E:



APPENDIX F: ALTMAN Z"-SCORE CALCULATION (2024)

Component	Value
X1 WC/TA	0.26
X2 RE/TA	0.474
X3 EBIT/TA	-0.047
X4 Equity/Liabilities	0.899
Z Score	3.88

GRAPH F:

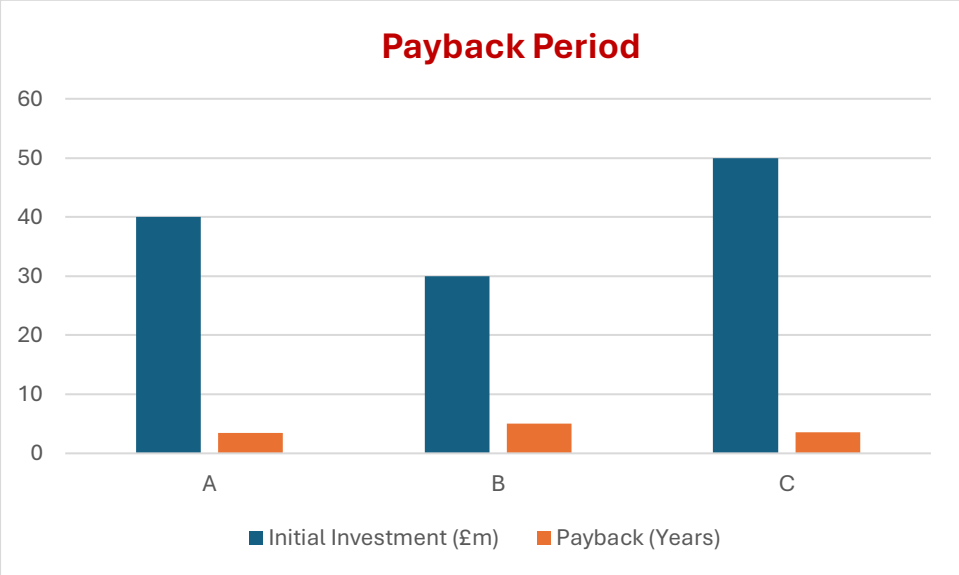


APPENDIX G: CAPITAL BUDGETING – PROJECT APPRAISAL

G1. Payback Period

Project	Initial Investment (£m)	Payback (Years)
A	40	3.4
B	30	5
C	50	3.6

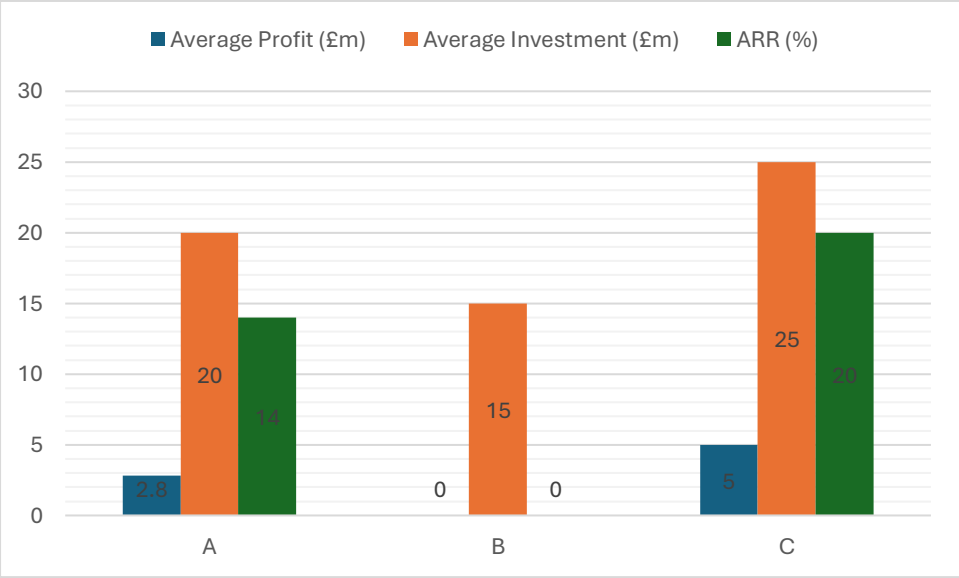
GRAPH G1:



G2. Accounting Rate of Return (ARR)

Project	Average Profit (£m)	Average Investment (£m)	ARR (%)
A	2.8	20	14
B	0	15	0
C	5	25	20

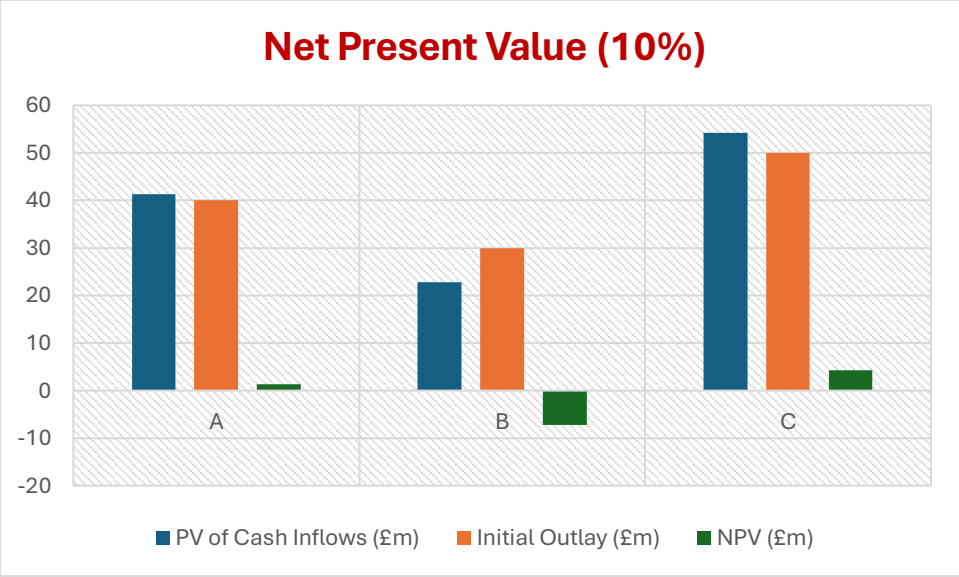
GRAPH G2:



G3.Net Present Value (10%)

Project	PV of Cash Inflows (£m)	Initial Outlay (£m)	NPV (£m)
A	41.31	40	1.31
B	22.75	30	-7.25
C	54.23	50	4.23

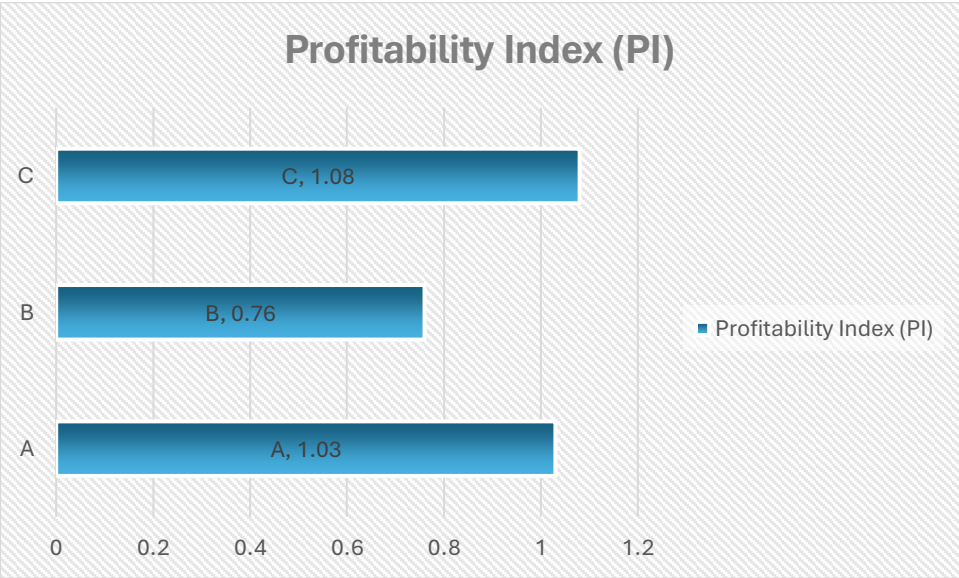
GRAPH G3:



G4. Profitability Index (PI)

Project	Profitability Index (PI)
A	1.03
B	0.76
C	1.08

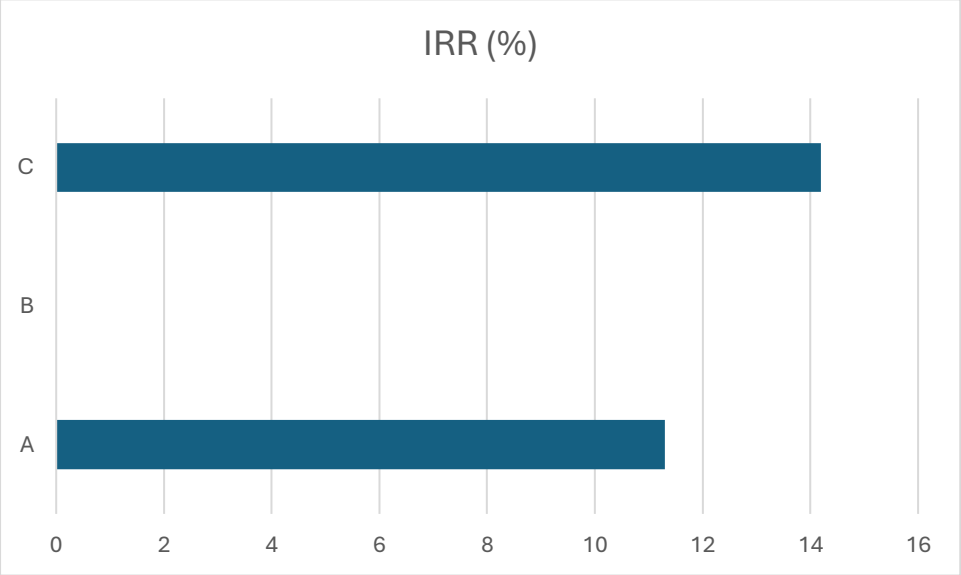
GRAPH G4:



G5. Internal Rate of Return (IRR)

Project	IRR (%)
A	11.3
B	~0
C	14.2

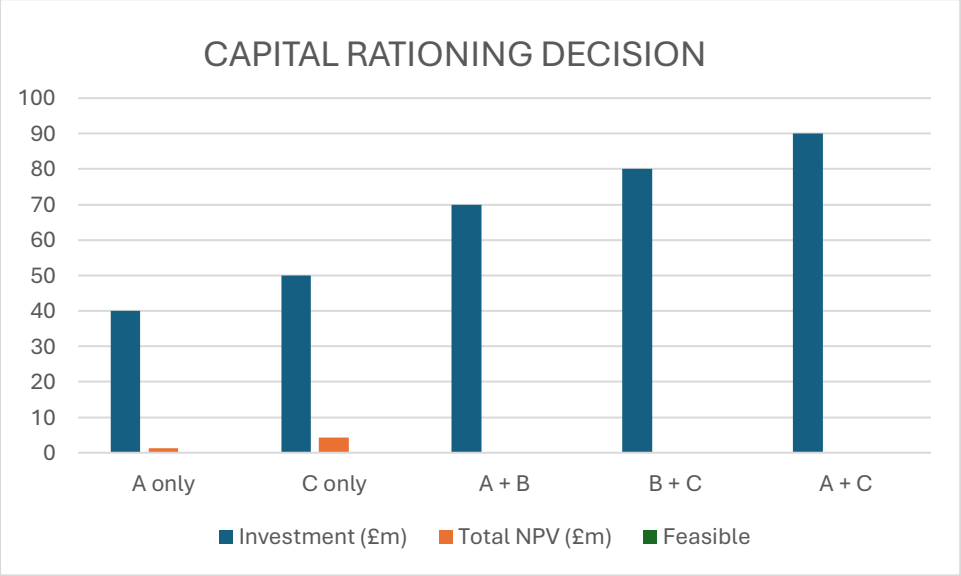
GRAPH G5:



APPENDIX H : CAPITAL RATIONING DECISION

Combination	Investment (£m)	Total NPV (£m)	Feasible
A only	40	1.31	Yes
C only	50	4.23	Yes
A + B	70	—	No
B + C	80	—	No
A + C	90	—	No

GRAPH H :



EXCEL SHEET

- https://uowtsd-my.sharepoint.com/personal/2503534_student_uwtsd_ac_uk/Documents/Book.xlsx?web=1