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"Financial Health and Strategic Investment Decisions: A Comprehensive Evaluation
for General Electronics"

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1 Introduction

In the modern world of intense competition in the business sector, proper financial management is the only hope of an organization to survive, particularly in times of financial troubles. Global player in the consumer electronics industry, General Electronics has been facing serious trouble in sustaining profitability and liquidity, as shown in the decreasing rates of return on capital and return on assets over the last five years. In order to overcome these problems, such a complex approach as financial health checks, working capital management, and strategic financial restructuring should be used to guarantee the recovery and sustainability of the company in the long term (Ross, 2015).

The report gives a comprehensive overview of the financial performance of the company, namely the analysis of the main financial ratios such as profitability, liquidity, and efficiency, and a thorough investment analysis of three of the proposed projects. The report goes further to discuss why the company needs to restructure using some of the strategies that include divestiture, equity injections, and mergers as part of improving the capital structure of the company and its financial health in general.

Through such financial applications as Payback Period (PBP), Accounting Rate of Return (ARR), Net Present Value (NPV), Profitability Index (PI), and Internal Rate of Return (IRR), this report evaluates the potential of each of the projects to create value given the capital rationing constraint of the company, which is of 60 million pounds (Damodaran, 2012). The last recommendation will involve choosing the most appropriate project to spur recovery.

2 Financial Health Check

One of the key diagnostic tools of corporate planning is a financial health assessment since it converts accounting data into understandable indications of profitability, liquidity, efficiency, and risks of defaulting. Ratio analysis is also more effective when applied to distressed companies, where, along with revenue or profit numbers, it will indicate structural unhealthiness that cannot be detected only by looking at headlines (Penman and Penman, 2010). Financial resilience in this context of global consumer electronics, where margins are vulnerable to price

competition, where product obsolescence is rapid, and supply-chain shocks are a common occurrence (Kiymaz, 2024).

2.1 Profitability Ratios

Table 1: Profitability Ratios

Profitability	2020	2021	2022	2023	2024
Return on Capital	11.27	7.92	5.06	-43.81	-9.27
Operating profit Margin	6.06	3.87	2.68	-20.29	-3.87
Return on Assets	7.56	1.04	0.08	-27.60	-7.43

The profitability profile of General Electronics indicates a definite change from moderate performance (2020-2022) to severe value destruction (2023-2024). The ROCE decreased to 7.92% (2021) and 5.06% (2022) and then collapsed to -43.81% (2023), and it continues to be at the negative level of -9.27% (2024). ROCE has become a popular strategic efficiency measure as it relates results of operation to capital base, which the management has control over (Penman and Penman, 2010). The negative swing is sharp, which is a pointer that the invested capital is not simply not performing well, it is making losses at a magnitude that can not be sustained in terms of capital structure.

The operating profit margin fell continuously between 6.06% and 2.68% in 2020-2022 and went down drastically to -20.29% (2023) and -3.87% (2024), respectively. This trend is an indicator of structural cost issues and pricing frailty as opposed to a small cyclical recession. In turnaround situations, compression of operating margin is particularly harmful as it decreases the ability of the firm to finance itself as it invests in its infrastructure and service debt, forcing it to rely on external funding (Ugur and Vivarelli, 2022).

Return on Assets (ROA) also declined by far, 7.56% (2020) to 1.04% (2021) and 0.08% (2022), and then became extremely negative in 2023 (-27.60) and 2024 (-7.43). A drop in ROA also suggests that the assets of the firm are not being used efficiently, a common distress signal of weak demand and inflexible fixed-cost structures (Altman, 1968). On the whole, the profitability ratios show that the core

business model has deteriorated significantly and needs both operational and financial rescue.

2.2 *Liquidity Ratios*

Table 2: Liquidity Ratios

Liquidity Ratio	2020	2021	2022	2023	2024
Current Ratio	1.82	1.56	1.56	1.61	1.53
Quick Ratio	1.15	0.93	0.91	1.06	1.03
Operating Cash Flow Ratio	0.41	0.19	0.05	0.16	0.09
Cash Interest Coverage	51.61	71.17	4.97	5.81	4.41

Liquidity ratios indicate that General Electronics is not at the moment in short term insolvency, but its buffer has been eroded and it is more susceptible to shocks. The current ratio declined to 1.56 (2021-2022) against 1.82 (2020) and slightly increased to 1.61 (2023) before declining to 1.53 (2024). Although values of more than 1.0 imply that the current liabilities are theoretically covered, poor companies may still fail when the current assets are illiquid (e.g., slow-moving inventory), especially in the context of declining revenue (Penman and Penman, 2010).

The quick ratio is also conservative in that inventory is not considered. It fell to below 1 in 2021 (0.93) and 2022 (0.91), but increased to 1.06 (2023) and 1.03 (2024). The dip of less than 1.0 in 2021-2022 suggests the times when presumably the firm had to rely on conversion of inventories or short-term borrowing to cover liabilities. Weak quick ratios that are accompanied by a decline in profitability usually represent a liquidity trap in the literature of working capital, where companies appear to be stable, but in reality, they are fragile because cash inflows are delayed and costs are sticky (Kiymaz, 2024).

The Operating Cash Flow Ratio of General Electronics demonstrates a strong negative trend as it decreased in 2020 (0.41), 2021 (0.19), collapsed in 2022(0.05), and is weak in 2023 (0.16) and 2024(0.09). Those ratios that are continuously lower than unity denote that the current cash flows are inadequate to meet the current liabilities, and the operation is increasingly relying on external financing and working capital changes to continue in operation.

The Cash Interest coverage ratio further brings out mounting financial weakness. Although the coverage in 2020 (51.6) and 2021 (71.2) was exceptionally high and demonstrated the strong cash-based capacity in debt-servicing, the 2022 (4.97), 2023 (5.81), and 2024 (4.41) values declined significantly. Even though it has not yet reached the critical point of 1, it is likely to experience a sharp downturn, which means a loss of a slender margin of safety.

2.3 Efficiency Ratios

Table 3: Efficiency Ratios

Efficiency Ratios	2020	2021	2022	2023	2024
Inventory Turnover Days	100.26	114.52	131.04	99.78	103.12
Receivables turnover days	76.86	78.40	75.55	97.74	105.54

Efficiency measures point to significant working capital imperfections that probably led to liquidity distress. The inventory turnover days (2020) of 100.26 were decreased to 114.52 (2021) and 131.04 (2022), which indicates that there was less movement of the product and a high risk of obsolescence occurring, especially in consumer electronics, due to shorter product cycles. The inventory days have also improved since the previous year to 99.78, although the latest data shows that it increased to 103.12 (2023). The studies always associate poor inventory management and longer operating cycles with poorer profitability and increased financial burden (Sabir, 2022; Kiymaz, 2024).

The situation with receivables turnover days is even worse since it increased slightly to 75.55 (2022), but then skyrocketed to 97.74 (2023) and 105.54 (2024). This reflects weaker credit management, slower collections, and a possible increase in the risk of default among customers. Empirical data indicate that the longer the receivables turnover period and ineffective conversion cycles of cash, the worse the performance of the firm since it ties down cash and increases the borrowing requirements (Sabir, 2022; Kiymaz, 2024).

Thus, efficiency ratios denote the increased financing of operations by tied-up working capital instead of cash by General Electronics, which cannot be considered a sustainable turnaround situation.

2.4 Gearing Ratios

Gearing Ratios	2020	2021	2022	2023	2024
Debt Ratio	0.39	0.46	0.47	0.50	0.53
Liabilities-to-Equity Ratio	0.63	0.85	0.88	0.99	1.11

The debt ratio increased, 0.39 (2020), 0.46 (2021), 0.50 (2023), and 0.53 (2024), which means that the financial activity is covering a growing proportion of assets with liabilities. The liabilities-to-equity ratio increased from 0.63 (2020) to 0.85 (2021), 0.88 (2022), 0.99 (2023), and 1.11 (2024). A ratio of more than 1 indicates that creditors have funded the company more than the stockholders, a situation usually associated with increased fragility and lack of strategic flexibility (Gungoraydinoglu and Öztekin, 2021).

The interest coverage ratio of the firm also declined drastically, as the ratio was highly covered during 2020-2022, but it was negative during 2023-2024. Leverage can be particularly perilous, as the operating profits go bad and the benefits of discipline of debt disappear, and the distress risk takes over (Ugur and Vivarelli, 2022). Therefore, it can be concluded that General Electronics is taking a highly leveraged position that is not supported by the operating returns to sustain it based on its trends in gearing.

2.5 Altman Z-Score Analysis and Default Risk Assessment

Table 4: Altman Z-Score

	2020	2021	2022	2023	2024
Z-Score	3.64	3.22	3.06	2.24	2.82

$$Z=1.2X_1+1.4X_2+3.3X_3+0.6X_4+1.0X_5$$

The Altman Z-Score model is used to estimate the likelihood of General Electronics getting into financial difficulties during 2020-2024 by integrating liquidity, cumulative profitability, operating performance, leverage, and asset efficiency to form one predictive index. The estimated Z-Scores decrease consistently in 2020 (3.64), then in 2021 (3.22) and 2022 (2.04), and then decrease drastically to 2.24 in 2023 and somewhat recover to 2.82 in 2024.

The Z-Scores of 2.99 or more in 2020-2022 indicate that the firm is in the safe zone due to strong retained earnings ($X_2 = 0.64-0.66$), high stability in the asset turnover ($X_5 = 1.08-1.20$), and average leverage. Nevertheless, the worsening of X_3 (EBIT/Total Assets) in 2023 (-0.24) is an indication of intense operating underperformance, which is the major cause of the reduction of the Z-Score to the grey zone. At the same time, the continuous decrease in X_4 (Equity/Liabilities) between 1.59 and 0.90 is a sign of increasing leverage and decreasing solvency. Despite the partial recovery in 2024, which is a sign of a stabilised situation in the liquidity and sales efficiency, the firm is still in the grey zone, which means that its default probability is high.

3 Working Capital Management Analysis

Table 5: Working Capital Management Analysis

Year	2020	2021	2022	2023	2024
Inventory Turnover Days	100.26	114.52	131.04	99.78	103.12
Receivables Turnover Days	76.86	78.40	75.55	97.74	105.54
Payables Days	69.29	78.95	66.72	64.47	93.60
Cash Operating Cycle	107.83	113.96	139.87	133.06	115.06

3.1 Assessment of the Cash Operating Cycle

Management of working capital is important to companies that are in financial distress since it has a direct result on liquidity, ability to stay in the business, and short-term solvency. Cash operating cycle (COC) is an indicator of liquidity efficiency by quantifying the delay in cash outflows on production against cash receipts, and thus, it is also known as the cash operating cycle (Kiymaz, 2024). In the case of General Electronics, the COC analysis presents structural weaknesses of the company over a span of 2020-2024.

The inventory turnover days of 2020 have risen to 100.26, whereas 2021 had recorded 114.52 and 2022 recorded 131.04, showing that there was a substantial reduction in the inventory turnover. Even though the inventory days have improved in 2023 (99.78 days), they increased in 2024 (103.12 days), which indicates that the inventory rationalisation processes have not been maintained. Long inventory holding in the consumer electronics sector exposes the business to technological

obsolescence and price erosion both of which impact negatively on margins and cash flows (Sabir, 2022).

The turnover days also worsened significantly as compared to previous years, as the turnover of receivables improved from 76.86 days in 2020 to 105.54 days in 2024. This turn is an indicator of deteriorated credit control and delayed payment to customers that explicitly limit operating cash inflows. Empirical studies have proven that long periods of receivables substantially affect the liquidity and raise the dependence on short-term borrowing (Baanos-Caballero et al., 2014).

The days of payables varied throughout the period, and in 2020, they were 69.29 days, which decreased to 78.95 days in 2021 and then sharply decreased to 93.60 days in 2024. Although longer payables can provide a short-term relief to liquidity constraints, overdependence on the supplier credit can ruin supplier relationships and raise supply-chain risk.

This has caused the cash operating cycle to be high over the period, with a high of 139.87 days in 2022 and a high in 2023 (133.06 days), and then declining to 115.06 days in 2024. Although this has been made slightly better, the cycle is still too long, meaning that the liquidity challenge faced by General Electronics is not transient.

3.2 Strategies to Improve Liquidity through Working Capital Reforms

Since the operating cash cycle is long, specific working capital reforms are necessary to replenish the liquidity and decrease the reliance on external financing. First, there should be inventory optimisation by demand forecasting, product rationalisation, and just-in-time procurement where possible. According to research, it is also possible to achieve a significant increase in operating cash flow by decreasing inventory days without the need to spend extra capital on it (Kiymaz, 2024).

Second, better control of receivables should be reinforced with a more stringent credit policy, credit evaluation of customers, and incentives for early payments. Cash inflows may also be increased faster with digital invoicing and automated collections. Research indicates that companies that have stricter control of their accounts have lower financing expenses and enhanced liquidity strength (Baanos-Caballero et al., 2014).

Third, the payables management is to be transformed into a reactive extension to strategic supplier negotiation. Although the growth in the payables days in 2024 eased the situation in the short term, the overstretching of payables might harm supplier confidence and derail supply. Reform of sustainable working capital needs a balance between maintaining liquidity and stability of the supply-chain (Deloof, 2003).

Last, operational restructuring should be combined with working capital reforms. Cost discipline, margin recovery, and inventory discipline should work together in order to make sure that the improvements in liquidity are there to stay and not to be superficial.

3.3 Short-Term versus Long-Term Financing Options

The ongoing weakness in operating cash flow poses the strategic question regarding the financing structure. The short-term funding as lines of credit and trade credit, provides flexibility and quick access to funds, and so it would be appealing in times of operational pressure. Nonetheless, an overdependence on short-term funding enhances the refinancing risk and subjects the firm to the fluctuation of interest rates, especially during times of weak profitability (Ugur and Vivarelli, 2022).

Long-term financing, on the other hand, offers more stability as the funding maturity is aligned with the asset life cycle. Long-term debt or equity injections decrease rollover risk and enable the management to concentrate on the recovery of the operations instead of the liquidity management in the short-term. Nevertheless, the long-term financing can be very expensive in terms of explicit expense, and it can be accompanied by covenantal restrictions or dilution of ownership.

Considering that, General Electronics has a falling interest coverage and a high risk of default, a mixed-based financing strategy is needed. The limited application of short-term financing should be in the process of smoothing the cash-flow volatility, whereas the long-term financing will be based on structural restructuring and investment in operational efficiency. In academic literature, it has always been concluded that firms that have implemented both working capital reform and financing maturity alignment attain more sustainable recoveries as compared to

those that have applied short-term liquidity measures alone (Kamaluddin et al., 2019).

Thus, the working capital analysis reveals that the liquidity stress experienced by General Electronics is due to a consistently long cash operating cycle, poor collections of receivables, and unreliable administration of payables.

4 Strategic Financial Restructuring Plan

Table 6: Key Financial Ratios and Indicators for General Electronics (2020-2024)

Year	2020	2021	2022	2023	2024
Profitability					
Return on Capital	11.27	7.92	5.06	-43.81	-9.27
Operating Profit Margin	6.06	3.87	2.68	-20.29	-3.87
Return on Assets	7.56	1.04	0.08	-27.60	-7.43
Liquidity Ratios					
Operating Cash Flow Ratio	0.41	0.19	0.05	0.16	0.09
Cash Interest Coverage	51.61	71.17	4.97	5.81	4.41
Current Ratio	1.82	1.56	1.56	1.61	1.53
Quick Ratio	1.15	0.93	0.91	1.06	1.03
Efficiency Ratios					
Inventory Turnover Days	100.26	114.52	131.04	99.78	103.12
Receivables Turnover Days	76.86	78.40	75.55	97.74	105.54
Cash Operating Cycle	107.83	113.96	139.87	133.06	115.06

4.1 Rationale for Financial Restructuring

The financial analysis of General Electronics in the last 5 years reveals that the company requires strategic financial restructuring. Slowing Return on Capital (ROCE) and Return on Assets (ROA), and declining operating profit margins are indicators of value destruction, not of cyclical flaw. Liquidity ratios of the company, such as a low Operating Cash Flow Ratio, show that it is becoming more dependent on the outside sources of finance to finance its short-term liabilities, which is being exacerbated by the fact that its Cash Interest Coverage Ratio is declining. Based on these predicaments, a restructuring plan is essential to revive profitability and liquidity (Penman and Penman, 2010).

4.2 Divestiture and Asset Rationalisation

Selling non-core or poorly performing assets is one of the strategies to enhance access to liquidity and simplify the operating procedures. General Electronics is

failing to make good use of its assets, with a ROA of -7.43% being lower than it was in 2020 (7.56%). By selling off non-performing foreign subsidiaries and non-core businesses, it is possible to gain cash immediately, and this would assist the firm in lowering its days of inventory turnover, as well as days of receivables turnover (Denis and Denis, 1995). Divestiture further enables the business to concentrate on its core business areas, enhancing the efficiency of its operation and capital efficiency (Chen and Feldman, 2018). The liquidation of non-core investments may result in the release of cash to invest back into the business, which is performing well, which help the company can recover in the long-term.

Selling the non-performing assets is also necessary not only to enhance the liquidity but also to streamline the operations. Although General Electronics is experiencing a declining ROA, it should consider shedding its foreign subsidiaries or any other non-core business that is using its resources without getting commensurate returns. The studies have found that firms that make wise divestment decisions (i.e., those that are strategically planned) tend to be in a position to reallocate their resources by refocusing on their core capabilities (Alles, 2020). The sale of assets is one of the options that General Electronics may pursue to address the company's negative operating margins and inject the capital that is required to enhance cash flow and liquidity. More so, these divestitures must focus on the assets that move less frequently or are not of much value to the competitive advantage of the company. Asset rationalisation can also help a firm to dump its legacy operations, burdening its efficiency, which could improve its general operational productivity in the long term (Chen and Feldman, 2018).

4.3 Equity Injection and Capital Structure Repair

General Electric needs an equity injection that can rejuvenate its solvency and minimise current debt levels. The growing liabilities-to-equity ratio and shrinking interest coverage is a pointer that the capital structure of the company is under pressure. Though dilutive, equity financing is a good method of strengthening the balance sheet, reducing leverage, and financial risk (Myers, 1984). A rights issue or strategic investor placement would help increase the equity base, enhance the Altman Z-Score, and simplify the refinancing process. Even though equity financing

reduces ownership, it is a value-saving option to overborrowing that may cause even more damage to liquidity.

An equity issue can help the firm build the financial cushion it needs to take on short-term volatility and get its balance sheet stable without the additional burden of debt. Besides, capital can be flown in by strategic investors or by private equity firms who are willing to inject capital in return for growth opportunities in the future, a guarantee of immediate liquidity, and sustainability over the long run.

4.4 Merger or Strategic Alliance

Mergers or strategic alliances may have great benefits as they may provide economies of scale, access to new technologies, and enhancements in the supply chain efficiencies. Such alternatives are especially relevant to companies such as General Electric that are highly competitive. A merger would allow sharing of costs and restructuring of debts, whereas a strategic alliance would allow access to new resources and markets without complete integration of their operations (Trautwein, 1990). Nevertheless, mergers have risks of ineffective execution, and they may not work in case of poor management of the integration process. This is why a strategic alliance with key players can be a less risky alternative, as they will be able to collaborate without losing the independence of the company.

4.5 Impact on Debt Structure and Financial Risk

The indicated restructuring plans would enable General Electronics to fix its debt structure and decrease its dependency on short-term debts. The liquidation of assets would give instant cash to balance the liabilities, whereas the infusion of equity would consolidate the balance sheet, reducing the debt-to-equity ratio and enhancing solvency (Alles, 2020). Such measures would decrease the refinancing risk of the company, especially the exposure to short-term debt, which is the primary issue to be considered because of its high current liabilities and poor operating cash flow (Ugur and Vivarelli, 2022).

4.6 International and Ethical Considerations

International restructuring activities, especially divestiture or mergers, should include consideration of taxation and currency risks. The sale of assets in a foreign

market can give rise to capital gains taxes or may cause currency fluctuations that can influence the valuations. Such risks can be reduced by effective tax planning and risk mitigation, including hedging or effective management of foreign exchange (OECD, 2022).

On an ethical level, the company should make sure that the restructuring work does not disproportionately adversely affect the stakeholders, including employees or suppliers, disproportionately. There is a need to communicate transparently to ensure trust, particularly in times of merger or strategic alliance, where the interests of two or more parties could be at stake (Lins et al., 2017).

4.7 Strategic Evaluation and Recommendation

General Electronics ought to adopt a restructuring approach, which is a hybrid approach involving divestiture, equity injection, and strategic alliances or mergers. These will enhance liquidity, financial risk minimization, and operational flexibility. The company is able to sell non-core assets to access immediate cash to settle its debts, and equity financing will stabilize its balance sheet (Allen et al., 2011). Moreover, the strategic alliances will assist the company in staying competitive without taking unnecessary risks. Therefore, a tactical combination of restructuring strategies will aid in shaping the long-term objectives of General Electronics to improve its financial status.

5 Investment Appraisal and Capital Budgeting

Capital budgeting is a vital tool of financial management of an organization, especially when it is in financial distress, such as General Electronics. The company has limited liquidity and decreasing profitability, and so it should invest its limited capital of £60 million in the suggested projects with care to achieve value maximization. The three proposed investment projects have been evaluated in this section using Payback Period (PBP), Accounting Rate of Return (ARR), Net Present Value (NPV), Profitability Index (PI), and Internal Rate of Return (IRR), which helps in determining the best investment option.

General Electronics has a financial performance with falling profitability (negative ROCE and ROA) and poor operating cash flow that demonstrates the necessity to choose projects with value creation, liquidity-friendly, and risk-appropriate

characteristics (Ross, 2015). The £60 million capital rationing constraint causes even further reasons to make a deep analysis of the potential of each project.

5.1 Project Cash Flow Overview

The proposed projects, each with different initial investments and cash flow structures, are summarized below:

- Project A requires an initial investment of £40 million, with expected cash inflows of £10m, £12m, £14m, £10m, and £8m over the five years.
- Project B requires an initial investment of £30 million, with steady annual cash inflows of £6m over five years.
- Project C requires an initial investment of £50 million, with increasing cash inflows: £5m, £10m, £20m, £25m, and £15m.

These cash flows are assessed using the standard financial metrics of investment appraisal to determine their suitability for the firm's financial recovery.

5.2 Investment Appraisal Methods

Table 7: Investment Appraisal Metrics for Projects A, B, and C

Project	Payback Period (PBP)	Net Present Value (NPV)	Profitability Index (PI)	Internal Rate of Return (IRR)	Accounting Rate of Return (ARR)
Project A	3.4 years	-£440,000	-10	11%	14%
Project B	4.83 years	-£390,000	-12	0%	0%
Project C	3.16 years	-£300,000	-5	13%	20%

5.2.1 Payback Period (PBP)

Payback Period (PBP) is the duration required for an investment to recoup the investment cost. This is especially significant in the case of General Electronics, considering that it has liquidity limitations. A low payback period implies that the financial risk is reduced since the cash flows are recouped faster (Arnold, 2019; Koller et al., 2010).

Project A:

Project A's cumulative cash flow will turn positive in Year 4, and then the Payback Period will be 3.4 years. This is grounded on the fact that at Year 3, the cumulative cash flow will be -4m, and in Year 4, the cumulative cash flow of 10m will recoup the balance of 4m.

Project B:

In the case of Project B, the initial investment of 30M will be recovered in 5 years because of the constant 6m inflows every year that will give Project B 5 years Payback Period.

Project C:

Project C has a Payback Period of 3.16 years, and the cumulative cash flow becomes positive in Years 3-4.

Project A has the best recovery, and the best among all project types to choose is Project C, as compared to Project B, which has the slowest recovery, although it has constant cash flows. Project C is the best choice in terms of payback as General Electronics requires faster access to liquidity.

5.2.2 Accounting Rate of Return (ARR)

The ARR is used to estimate the average annual accounting profit of the project in terms of average investment. Although it does not take into consideration the time value of money, it gives an understanding of profitability (Higgins, 2025).

The ARR of project A is 14%, which indicates a good payoff on the initial investment; it is a good selection in terms of profitability perspective.

Project B possesses ARR 0, meaning that there is no profitability beyond the start-up capital.

Project C has the highest ARR at 20%, which is a high rate of return as compared to the initial investment of the project.

Nonetheless, cash flow timing is not considered within the ARR approach, as well as time value of money is ignored; this is why the method is applied to NPV and IRR to make a more complex decision.

5.2.3 *Net Present Value (NPV)*

The best approach to evaluate the investment is NPV, which considers the time value of money in such a way that future cash inflows are discounted accordingly (Atrill and McLaney, 2023). It is used to determine the value added to the firm by the investment.

The NPV of project A is negative (-£440), which implies that this project generates value destruction to the company at the cost of capital (10%).

Project B shows a negative NPV of -390 pounds sterling, and this is not, therefore, a viable project to invest in as it will decrease shareholder wealth.

Project C is less attractive than Project A in terms of value creation, as it has a negative NPV of - 300.

Even though Project C has the best ARR and PI, the NPV is negative, and thus it is not the most preferable option in terms of long-term value creation to shareholders. The NPV of project C is, however, not as negative as that of the other two, this makes it preferable amongst the other available options.

5.2.4 *Profitability Index (PI)*

Profitability Index (PI) is the ratio of the present value of the inflows of cash to the initial investment. It aids in capital rationing, which gives an idea about the relative value created per unit of capital spent (Ross, 2015).

The PI of project A is -10, which means that the project is not able to yield enough returns.

The PI of project B is -12, which is a confirmation that they are not using capital efficiently.

Project C PI = -5, which is comparatively good when compared to Projects A and B, but lower than the value creating mark of 1.

The Profitability Index analysis once again reiterates that Project A and Project B do not add value, whereas Project C, though volatile, provides a little better capital efficiency.

5.2.5 Internal Rate of Return (IRR)

The IRR is the discount rate at which the NPV will become zero, and it gives the estimation of the expected rate of return of the project.

The IRR of project A stands at 11%, which is more than the cost of capital of the company (10%), and this implies a positive payoff.

The IRR on Project B is 0, meaning that the project is not profitable in making a profit that exceeds the cost of capital.

Project C has an IRR of 13%, which is competitive, but the project has a negative NPV.

Project C is, therefore, the best alternative to use in comparison to Project A and Project B because it has the highest IRR, besides other indicators.

5.3 Final Investment Recommendation

Project C will be the most appropriate investment for General Electronics, considering the capital rationing constraint of 60 million. Although it is wise to have the various appraisal metrics, Project C demonstrates strength in some key performance indicators; hence makes it the best option of the three proposed projects.

Project C has a Payback Period (PBP) of 3.16 years as compared to Project A, PBP of 3.4 years; however, it is much lower than Project B, PBP of 5 years. Project C is a viable choice considering the financial predicament that the company is in due to its relatively fast payback on the initial investment. The lower payback period is particularly advantageous to General Electronics, as it will decrease the liquidity risk of the firm in question and will guarantee the prompt access to the recovered capital (Ross, 2015).

Also, Project C offers a high IRR of 13 percent as compared to the other two projects. This is higher than the cost of capital of the company (10%), meaning that Project C has the highest potential returns on investment. Project C is also more profitable compared to the other projects with an ARR of 20% and, therefore, would yield good accounting returns concerning the initial investment (Damodaran, 2012).

Another indicator that is essential to Project C is its Profitability Index (PI) of -5, which is, even though negative, not as negative as the Profitability Indexes of Project A (-10) and Project B (-12). This causes Project C to be somewhat more efficient in terms of value creation per unit dollars invested, even with the negative PI. The NPV of Project C negative value of -300k is negative but smallest than Project A -440k and Project B -390k. This implies that Project C is a more capital-efficient investment, although none of the projects produce a positive net value at the 10 percent discount rate.

6 Conclusion

The report has examined the financial performance of General Electronics in the last five years, which has revealed the decreasing profitability, liquidity problems, and increasing financial risks of the company. The ratio analysis demonstrated alarming trends such as negative return on capital and assets, poor operating margin, and a depreciating interest coverage ratio. These financial bottlenecks underline the importance of a prudent decision to invest in the capital constraint of the rationing of the capital to a limitation of 60 million.

The Payback Period (PBP), ARR, NPV, PI, and IRR investment appraisal of Project A, Project B, and Project C were useful in gaining knowledge. Project A, which has a quick payback and a good ARR, has a negative NPV. Project B was rejected because it had a negative NPV, 0% IRR, and a long payback period. Project C possessed the highest IRR (13%), ARR (20%), although it had a worse NPV, shorter payback period (3.16 years), and lower negative PI (-5).

The investment that is recommended is Project C, based on the financial status of the company. It offers a balance between profitability, capital efficiency, and liquidity, which gives General Electronics the best chance of recuperating financially and increasing shareholder value.

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8 Appendices

	(£m)										
	2020	2021	2022	2023	2024	Profitability	2020	2021	2022	2023	2024
						Return on Capital	11.27	7.92	5.06	-43.81	-9.27
						Operating profit Margin	6.06	3.87	2.68	-20.29	-3.87
						Return on Assets	7.56	1.04	0.08	-27.60	-7.43
Total liabilities	196,989	234,399	235,757	176,952	170,249	Liquidity Ratio					
Total shareholders' equity	313,301	275,949	268,406	178,920	153,105	Current Ratio	1.82	1.56	1.56	1.61	1.53
Total current liabilities	179,510	216,787	216,473	161,148	158,291	Quick Ratio	1.15	0.93	0.91	1.06	1.03
Net income	38,572	5,301	407	-98,238	-24,029	Efficiency Ratios					
Earnings per share (£)	2.72	0.39	0.03	-7.64	-1.85	Inventory Turnover Days	100.26	#####	131.04	99.78	103.12
Interest Expenses	1,422	566	2,200	4,332	3,361	Receivables turnover day	76.86	78.40	75.55	97.74	105.54
Total Assets	510,290	510,348	504,163	355,872	323,354	Debt Ratio	0.39	0.46	0.47	0.50	0.53
Total Revenue	614,680	601,602	542,751	420,457	394,879	Liabilities-to-Equity Ratio	0.63	0.85	0.88	0.99	1.11
Total Current Assets	326,843	337,146	338,040	258,851	242,494	Investment Ratio					
Inventories	120,430	134,469	140,181	88,273	79,355	Earnings per Share	2.72	0.39	0.03	-7.64	-1.85
Total current liabilities	179,510	216,787	216,473	161,148	158,291	Interest Coverage	26.20	74.54	29.41	6.61	-19.7
Total equity	313,301	275,949	268,406	178,920	153,105	Operating Cash Flow Ratio	0.41	0.19	0.05	0.16	0.09
Trade Recieveables	129,433	129,215	112,346	112,596	114,182	Cash Interest Coverage	51.61	71.17	4.97	5.81	4.41
Inventories	120,430	134,469	140,181	88,273	79,355	X ₁	0.29	0.24	0.24	0.27	0.26
Cash and cash equivalents	57,153	60,813	66,740	42,751	26,783	X ₂	0.64	0.65	0.66	0.65	0.64
Interest Expenses	1,422	566	2,200	4,332	3,361	X ₃	0.07	0.05	0.03	-0.24	-0.05
cost of sales	438,424	428,586	390,459	322,897	280,885	X ₄	1.59	1.18	1.14	1.01	0.90
operating profit	37,267	23,253	14,548	-85,301	-15,297	X ₅	1.20	1.18	1.08	1.18	1.22
Net income attributable to Shareholde	38,572	5,301	407	-98,238	-24,029	Z-Score	3.64	3.22	3.06	2.24	2.82
Trade payables	83,229	92,707	71,373	57,033	72,031	Payables Days	69.29	78.95	66.72	64.47	93.60
Net cash from operating activities	73,392	40,283	10,926	25,190	14,822	Cash Operating Cycle	107.83	#####	139.87	133.06	115.06
Retained earnings	324,990	330,291	330,698	232,460	208,431						

	Discount rate	0.1													
							Project A								
Year	Discount Factor														
	1	0.91													
	2	0.83													
	3	0.75													
	4	0.68													
	5	0.62													
Year	Cash Flow	Cumulative Cash Flow	Present Value (PV)	Total PV	NPV	Profitability Index (PI)	Internal Rate of Return (IRR)	Initial Investment	Project Life	Annual Depreciation	Total Cash Inflows	Total Profit	Avg Annual Profit	Average Investment	ARR
0	-40	-40		-400	-440	-10	11%	40	5	8	54	14	2.8	20	0.14
1	10	-30	-300												
2	12	-18	-216												
3	14	-4	-56												
4	10	6	60												
5	8	14	112												
				PBP	NPV	Profitability Index (PI)	Internal Rate of Return (IRR)	ARR							
				3.4	-440	-10	0.11	0.14							

	Discount rate	0.1													
Year	Discount Factor	Project B													
1	0.91														
2	0.83														
3	0.75														
4	0.68														
5	0.62														
Year	Cash Flow	Cumulative Cash Flow	Present Value (PV)	Total PV	NPV	Profitability Index (PI)	Internal Rate of Return (IRR)	Initial Investment	Project Life	Annual Depreciation	Total Cash Inflow	Total Profit	Avg Annual Profit	Average Investment	ARR
0	-30	-30		-360	-390	-12	0.00%	30	5	6	30	0	0	15	0
1	6	-24	-144												
2	6	-18	-108												
3	6	-12	-72												
4	6	-6	-36												
5	6	0	0												
				PBP	NPV	Profitability Index (PI)	Internal Rate of Return (IRR)	ARR							
				4.83	-390	-12	0E+00	0							







