

FORECAST CASE



Sarang Gaikwad

I. Assessment of Financial Distress

A. Calculate the Altman Z-score for 2023 and 2022.

Formula to calculate Altman Z-score:

$X1 = \text{Working capital} / \text{Total Assets}$

$X2 = \text{Retained Earnings} / \text{Total Assets}$

$X3 = \text{EBIT} / \text{Total Assets}$

$X4 = \text{Market Value of Equity} / \text{Book Value of Debt}$

$X5 = \text{Sales} / \text{Total Assets}$

$Z = 1.2 (X1) + 1.4 (X2) + 3.3 (X3) + 0.6 (X4) + 1.0 (X5)$

	2023	2022
TOTAL ASSETS	15,803	17,504
TOTAL LIABILITIES	8,979	10,674
RETAINED EARNINGS	2,430	2668
SALES	46,298	51,761

Working Capital = Currents Assets – Current Liabilities

2022 = 10539 – 10674
= \$ (135)

Working Capital = Currents Assets – Current Liabilities

2023 = 8802 – 8979
= \$ (177)

Earnings Before Income and tax = Operating Income + Other Income

2022 = 3039 + 10
= \$ 3049

Earnings Before Income and tax = Operating Income + Other Income

2023 = 1795 + 28
= \$ 1823

MARKET CAPITALIZATION = Latest Closing Share Price * Total Shares Outstanding

(2022) = 101.55 * 227.4 = 227,400,000
= \$ 23092470000

MARKET CAPITALIZATION = Latest Closing Share Price * Total Shares Outstanding

(2023) = 80.21 * 218.1 = 218,100,000
= \$ 17493801000

X1 = Working capital / Total Assets

2022 = 135 / 17504
= 0.00771252

2023 = 177 / 15803
= 0.01120

X2 = Retained Earnings / Total Assets

2022 = 2668 / 17504
= 0.1524223

$$2023 = 2430 / 15803$$

$$= 0.153768$$

$$\mathbf{X3} = \mathbf{EBIT / Total Assets}$$

$$2022 = 3049 / 17504$$

$$= 0.174188$$

$$2023 = 1823 / 15803$$

$$= 0.115357$$

$$\mathbf{X4} = \mathbf{Market Value of Equity / Book Value of Debt}$$

$$2022 = 23092.470000 / 1229$$

$$= 18.789642$$

$$2023 = 17493.801000 / 1176$$

$$= 14.875681.1$$

$$\mathbf{X4} = \mathbf{Sales / Total Assets}$$

$$2022 = 51,761 / 17504$$

$$= 2.9579$$

$$2022 = 46298 / 15803$$

$$= 2.9296$$

Altman Z-score 2022

$$Z = 1.2 (X1) + 1.4 (X2) + 3.3 (X3) + 0.6 (X4) + 1.0 (X5)$$

$$= 1.2(-0.00771252) + 1.4 (0.1524223) + 3.3(0.174188) + 0.6 (18.789642) + 1.0(2.9579)$$

$$= 15.00983981$$

Altman Z-score 2023

$$Z = 1.2 (X1) + 1.4 (X2) + 3.3 (X3) + 0.6 (X4) + 1.0 (X5)$$

$$= 1.2(0.01120) + 1.4 (0.153768) + 3.3(0.115357) + 0.6 (X4) + 1.0(2.9296)$$

$$= 12.4376215$$

B. Comment on the significance of the Altman Z-scores calculated above

⇒ As we know that the higher the Altman Z-score, the better the company is.

We know that,

Z-score of less than 1.81 suggests a high probability of bankruptcy.

Z-score between 1.81 to 2.99 indicates a gray area where a significant financial analysis must be done to determine financial distress.

Z-score above 2.99 indicates a low probability of bankruptcy.

For Best Buy in 2023 and 2022, the Altman Z-scores are 12.2376 and 15.0098, respectively. These scores are remarkably elevated, greatly exceeding the benchmark of 2.99, which typically denotes a low probability of bankruptcy. This indicates that Best Buy has very little chance of experiencing financial difficulties in the coming years, indicating that its financial health is exceptionally strong.

With a score of 15.0098 for 2022, Best Buy appears to have been in excellent financial standing, probably thanks to strong electronics sales and prudent management. The score for 2023 is still very high even though it decreased slightly to 12.2376. This slight decline could be the result of minor changes in market conditions or a stabilizing market as things get back to normal after the pandemic. In any case, both scores indicate excellent financial stability, which both raises investor confidence and provides a favorable outlook for Best Buy's financial future.

II. Analysis of Historical Operating Performance (GAAP Basis)

A. Perform a year-to-year trend analysis by computing the percentage change and dollar change between fiscal 2022 and fiscal 2021 for the following income statement items (use 2 decimal places to the right, i.e., 38.27%). Also, show dollar amounts for the fiscal 2023 and fiscal 2022-line items below.

\$ in millions	2023	2022	\$ Change	% change
Revenue	46,298	51,761	-5,463	-10.55%
Gross Profit	9,912	11,640	-1,728	-14.85%
Operating Income	1,942	3,039	-1,063	-35.37%
EBIT	1,823	3,049	-1,226	-40.21%
Interest Expense	35	25	10	40.00%
Net Income	1,419	2,454	-1,035	-42.18%
EBITDA	2,741	3,918	-1,177	-30.03%

	2023	2022
Gross Margin	21%	22%
Operating Margin	4.19%	5.81%
EBIT Margin	3.94%	5.89%
Interest Coverage	52.0857143x	121.96x
Net Margin	3.06%	4.74%
EBITDA Margin	5.92%	7.57%

Gross Margin = Gross Profit / Net Sales

2022 = 10573 / 51761 = 0.22

2023 = 9912 / 46298 = 0.21

Operating Margin = Operating Income / Net Sales

2022 = 3039 / 51761 = 0.05871

2023 = 1942 / 46298 = 0.0419

EBIT Margin = EBIT / Net Sales

2022 = 3049 / 51761 = 0.05890

2023 = 1823 / 46298 = 0.03937

Interest Coverage = EBIT / Gross Interest Expense

2022 = 3049 / 25 = 121.96

2023 = 1823 / 35 = 58.08571

Net Income = Net Income / Net Sales

2022 = 2454 / 51761 = 0.0474

2023 = 1419 / 46298 = 0.03064

EBITDA Margin = EBITDA / Net Sales

2022 = 3918 / 51761 = 0.0756

2023 = 2741 / 46298 = 0.05922

C. Discuss in detail the change in Best Buy's financial performance between fiscal 2023 and fiscal 2022

After calculating various margins and doing year-to-year trend analysis, we can conclude that the company's financials picked up in 2023:

The net sales dropped by 10.55% in 2023 as compared to 2022. Best Buy's revenue decline in fiscal 2023 was primarily due to a drop in comparable sales across key product categories, including computing, home theatre, mobile phones, and appliances. Additionally, online revenue, which totaled \$14.2 billion, decreased by 13.5% compared to the previous fiscal year. This suggests that Best Buy faced challenges in its core areas and in adapting to changing consumer trends, indicating the need for strategic adjustments to regain revenue growth.

Also, the company's gross profit decreased by 14.85% in 2022 which is also way better than in 2021. In fiscal 2023, Best Buy's gross profit rate decreased, mainly due to lower product margin rates driven by increased promotions, lower services margin rates due to the higher costs associated with the new Best Buy Totaltech membership program, and higher supply chain costs. These negative impacts were partially offset by a boost in profit-sharing revenue from the company's private label and co-branded credit card arrangement, as well as a \$30 million profit-sharing benefit from its services plan portfolio. Despite these mitigating factors, the overall drop-in gross profit rate indicates that Best Buy faced significant challenges during this fiscal period.

Best Buy's revenue decline in fiscal 2023 was primarily due to a drop in comparable sales across key product categories, including computing, home theatre, mobile phones, and appliances. Additionally, online revenue, which totaled \$14.2 billion, decreased by 13.5% compared to the previous fiscal year. This suggests that Best Buy faced challenges in its core areas and in adapting to changing consumer trends, indicating the need for strategic adjustments to regain revenue growth.

Best Buy experienced a decline in comparable sales due to a combination of factors. Firstly, the sales boom from fiscal 2022 and 2021, driven by increased demand for stay-at-home products during the COVID-19 pandemic and government stimulus payments, began to fade. Secondly, consumer spending shifted from durable goods to services like travel and entertainment, reflecting a return to pre-pandemic activities. Lastly, macroeconomic pressures such as high inflation and other factors led to reduced customer demand across the consumer electronics industry. These elements collectively contributed to the drop in Best Buy's sales, impacting its revenue, gross profit rate, SG&A, and operating income rate.

Best Buy's Earnings Before Interest and Taxes (EBIT) dropped by 40.21% in fiscal 2023, falling from \$3,049 million to \$1,823 million. This decline of \$1,226 million indicates significant operational challenges for the company, potentially due to increased costs, reduced profit margins, or other operational issues. Best Buy's Interest Coverage ratio fell from 121.96x to 52.09x in fiscal 2023, indicating a decreased ability to cover interest expenses with its earnings. This significant drop suggests higher interest costs or reduced earnings, highlighting potential financial challenges for the company. Altman Z-score obtained in the first section shows the company is in very good condition and cannot get bankrupt.

Best Buy's Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) declined by 30.03% in fiscal 2023. It dropped from \$3,918 million to \$2,741 million, representing a decrease of \$1,177 million. This substantial drop in EBITDA indicates a significant reduction in the company's operating performance, likely due to reduced revenue, reflecting financial challenges during the fiscal year.

Conclusion:

In summary, Best Buy's fiscal 2023 performance shows that it was a difficult year with notable drops in all major financial indices. To restore momentum and guarantee sustainable growth in the future, the company needs to concentrate on improving its service and product offerings, managing expenses, and adjusting to shifting customer preferences.

III. Financial Position (GAAP Basis) and ROE (DuPont) Analysis.

A.1. Calculate Best Buy's Return on Equity (ROE) for 2023 and 2022 using the 3-step DuPont model (assume total assets of \$19,067 million and shareholders' equity of \$4,587 million at 2021 fiscal year-end) Note: Show all formulas and calculations.

$(\text{Net Income} / \text{Net Revenue}) * (\text{Net Revenue} / \text{Average Total Assets}) * (\text{Average Total Assets} / \text{Average Shareholder's Equity})$

Net Income / Net Revenue

2022 = $2454 / 51761 = 0.0474$

2023 = $1419 / 46298 = 0.0306$

Net Revenue / Average Total Assets

2022 = $51761 / 18285.5 = 2.83$

2023 = $46298 / 16653.5 = 2.78$

Average Total Assets / Average Shareholder's Equity

2022 = $18825.5 / 3803.5 = 4.80$

2023 = $16653.5 / 2907.5 = 5.72$

ROE = Profit Margin * Asset Turnover * Financial Leverage

2022 = $0.0474 * 2.83 * 4.80 = 0.64388$

2023 = $0.0306 * 2.78 * 5.72 = 0.4865$

2. Discuss which factors (profitability, activity, solvency) are primarily driving the change in ROE between fiscal 2023 and 2022

The drop in Return on Equity (ROE) from 2022 to 2023 was primarily driven by a significant decrease in profitability. The profit margin fell from 0.0474 to 0.0306 due to a 12.7% reduction in computer and mobile phone sales, causing net income to drop from \$2,454 million to \$1,419 million.

Financial leverage increased from 4.80 in 2022 to 5.72 in 2023, indicating that Best Buy used more debt. While this rise in leverage could have helped maintain ROE, it wasn't enough to counteract the impact of the reduced profit margin. The slight decline in asset turnover from 2.83 to 2.78 had a minimal effect on ROE. Ultimately, the main cause of the drop in ROE was the decline in profitability, with increased financial leverage providing only a small offset.

B. Comment on Best Buy's liquidity position, as of January 28, 2023. Use liquidity ratios, available lines of credit, and the Company's access to the capital markets in your discussion.

Calculation of some Liquidity Ratios:

Current Ratio = Current Asset / Current Liability

2023 = $8802 / 8979 = 0.9802x$

Quick Ratio = $(\text{Cash} + \text{Marketable Securities} + \text{Account Receivable}) / \text{Current Liability}$

2023 = $(1874 + 1141) / 8979 = 0.3356$

Cash Flow Ratio = Operating Cash Flow / Current Liabilities

2023 = $1824 / 8979 = 0.2031$

Cash Ratio = $(\text{Cash} + \text{Marketable Securities}) / \text{Current Liabilities}$

2023 = $1874 / 8979 = 0.2087$

Best Buy's liquidity position as of January 28, 2023, appears somewhat strained based on the liquidity ratios provided. The Current Ratio is just below 1, indicating that the company has almost enough current assets to cover its current liabilities. However, the Quick Ratio and Cash Ratio are significantly lower, showing limited liquidity in terms of cash and near-cash assets to meet short-term obligations. The Operating Cash Flow Ratio also indicates that cash generated from operations is not sufficient to cover current liabilities fully.

C.**1. Comment on Best Buy's capital structure as of January 28, 2023.****TOTAL INTEREST BEARING-DEBT**

Total Debt to Total Capital Ratio = Total [I.B] debt / (Total Debt + Average Total Share)

$$2022 = 1229 / (1229 + 3020) = 0.2892 \cong \mathbf{28.92\%}$$

$$2023 = 1176 / (1176 + 2795) = 0.2961 \cong \mathbf{29.61\%}$$

Total debt to EBITDA = Total Debt / EBITDA

$$2022 = 1229 / 3918 = 0.429$$

$$2023 = 1176 / 2741 = 0.3137$$

In 2023, Best Buy saw a slight uptick in their reliance on debt, with their total debt compared to their overall capital increasing from around 28.92% to nearly 29.61%. While this increase isn't massive, it does suggest they're leaning a bit more on borrowing money. On a positive note, their capacity to handle debt improved. The ratio of their debt to earnings before certain expenses dropped from about 0.429 to roughly 0.3137 in 2023. This indicates they were generating more earnings compared to what they owed.

2. Calculate Best Buy's enterprise value on January 28, 2023.

Enterprise Value = Market Value of Equity + Market Value of Debt

Market Value of Equity = Share Price * Shares Outstanding

$$2023 = 85.18 * 218.1$$

$$= 18577.758$$

Market Value of debt = Book value of debt * % trading Value

$$2023 = 1176 * 94\%$$

$$= 1105.44$$

Enterprise Value = 18577.758 + 1105.44

$$2023 = 19683.198$$

Corresponding Ratio = Total (Market) Debt / Enterprise Value

$$2023 = 1105.44 / 19683.198$$

$$= 0.0561 \cong \mathbf{5.616\%}$$

Enterprise Value (EV) is a key metric in capital structure analysis because it provides a comprehensive view of a company's worth, encompassing both equity and debt. Best Buy's enterprise value, calculated at \$19,683.198 million on January 28, 2023, plays a pivotal role in capital structure analysis by offering a comprehensive view of the company's total value, encompassing both equity and debt components. Considering both its equity market capitalization and its debt obligations, Enterprise value is crucial for understanding the company's overall financial health, comparing it with competitors, and assessing its attractiveness for investors, especially in contexts like mergers and acquisitions.

D.**1. Calculate the average total life span of Best Buy's property, plant, and equipment at fiscal year-end 2023.**

AVERAGE TOTAL SPAN OF PP&E = Depreciation of PP&E / Current Year Depreciation Expense

$$2023 = 6976 / 832$$

$$= 8.38 \text{ years}$$

2. Calculate Best Buy's average age of property, plant, and equipment at fiscal year-end 2023.

Average Age = ACCUMULATES DEPRECIATION / DEPRECIATION EXPENSE

$$= 4624 / 832$$

$$= 5.56 \text{ years}$$

3. Comment on the outcome (meaning) of the ratios calculated above.

This implies that the company's assets tend to wear out or become obsolete relatively quickly, but considering how much they are depreciating, it's not a major concern

IV. 3-Year Financial forecast - Management Case:

A. Using the Company's forecast variables above, prepare a complete Income Statement Forecast for 2024, 2025, and 2026 (show all work).

	2024	2025	2026
Revenue	48288.814	49834.056	50880.5712
COGS	37834.2858	38,925	39,621
Gross Profit	10454.5282	10908.6749	11259.8704
SG&A	8155.98068	8416.97207	8593.72848
Restructuring Charges	16.4	17.9	18.7
Operating Income	2282.14755	2473.8028	2647.44193
Interest Income	30	33.2	24.6
Interest Expense	35.77	36.55694	37.3611927
Earning Before Tax	2276.37755	2470.44586	2634.68074
Income Tax	865.023468	938.769428	1001.17868
Net Income	1411.35408	1531.67643	1633.50206

2024

$$\text{Revenue} = 46298 * (1 + 4.3\%) = 48288.814$$

$$\text{Gross Margin} = 21.40\% + 0.24 = 21.65\%$$

$$\text{COGS} = 48288.814 - 10454.5282 = 37834.2858$$

$$\text{Gross Profit} = (48288.814 * 21.65\%) = 10454.5282$$

$$\text{SG\&A} = 48288.814 * 16.89\% = 8155.98068$$

$$\text{Restructuring Charges} = 16.4$$

$$\text{Operating income} = 10454.5282 - 8155.9806 - 16.4 = 2282.1475$$

$$\text{Investment income and other} = 30$$

$$\text{Interest expense} = 35 * (1 + 2.2\%) = 35.77$$

$$\text{EBIT} = 2281.1475 + 30 - 35.77 = 2276.3775$$

$$\text{TAX} = 2276.3775 * 38\% = 865.0234$$

$$\text{Net Income} = 2276.3775 - 865.0234 = 1411.3540$$

2025

$$\text{Revenue} = 46288.814 * (1 + 3.2\%) = 49834.056$$

$$\text{Gross Margin \%} = 21.65 + 0.24 = 21.89\%$$

$$\text{Gross Profit} = 49834.056 * 21.89\% = 10908.6749$$

$$\text{COGS} = 49834.056 - 10908.6749 = 38925.3812$$

$$\text{SG\&A} = 49834.056 * 16.89\% = 8416.97207$$

$$\text{Restructuring Charges} = 17.9$$

$$\text{Operating income} = 10908.6749 - 8416.97207 - 17.9 = 2473.8028$$

$$\text{Investment income and other} = 33.2$$

$$\text{Interest expense} = 35.77 * (1 + 2.2\%) = 36.557$$

$$\text{EBIT} = 2473.8028 + 33.2 - 36.57 = 2470.4458$$

TAX = $2470.4458 * 38\% = 938.7694$
 Net Income = $2470.4458 - 938.7694 = 1531.6764$

2026

Revenue = $49834.056 * (1 + 2.1\%) = 50880.5712$
 Gross Margin = $21.89 + 0.24 = 22.13\%$
 Gross Profit = $50880.5712 * 22.13\% = 11259.8704$
 COGS = $50880.5712 - 11259.8704 = 39621$
 SG&A = $50880.5712 * 16.89\% = 8593.7284$
 Restructuring Charges = 18.7
 Operating income = $11259.8704 - 8593.7284 - 18.7 = 2647.4419$
 Investment income and other = 26.9
 Interest expense = $36.557 * (1 + 2.2\%) = 37.3611$
 EBIT = $2647.4419 + 24.6 - 37.3611 = 2634.6819$
 TAX = $2634.6819 * 38\% = 1001.1786$
 Net Income = 1633.5020

B. Based on the above, prepare a Statement of Free Cash Flows for 2024, 2025, and 2026.

In millions of dollars	2024	2025	2026
EBITDA	3264.64555	3487.90243	3669.46258
Maintenance CAPEX	291.2	260.4	246.75
Dividends	218.759882	237.409847	253.192819
Free Cash Flow	2754.68567	2990.09258	3169.51976

2024

EBIT = $2276.3776 + 30 = 2306.3776$
 Depreciation = $918 * (1 + 2.6\%) = 941.868$
 Restructuring Charges = 16.4
 EBITDA = $2306.3776 + 941.868 + 16.4 = 3264.6455$
 Maintenance CAPEX = $832 * 35\% = 291.2$
 Dividend = $1411.3540 * 15.5\% = 218.76$
 Free Cash Flow = $3264.6455 - 291.2 - 218.76 = 2754.6856$

2025

EBIT = $2470.44586 + 33.2 = 2503.6458$
 Depreciation = $941.868 * (1 + 2.6\%) = 966.3565$
 Restructuring Charges = 17.9
 EBITDA = $2503.6458 + 966.3565 + 17.9 = 3487.90243$
 Maintenance CAPEX = $744 * 35\% = 260.4$
 Dividends = $1513.6764 * 15.5\% = 237.4098$
 Free Cash Flow = $3487.90243 - 260.4 - 237.4098 = 2990.09258$

2026

EBIT = $2634.6803 + 24.6 = 2659.2803$
 Depreciation = $966.3565 * (1 + 2.6\%) = 991.4818$
 Restructuring Charges = 18.7
 EBITDA = $2659.2803 + 991.4818 + 18.7 = 3669.462$
 Maintenance CAPEX = $705 * 35\% = 246.75$
 Dividends = $1633.5020 * 15.5\% = 253.1928$
 Free Cash Flow = $3669.462 - 246.75 - 253.1928 = 3169.51976$

C. Using the Fixed Charge Coverage ratio formula discussed in class, calculate Best Buy's Fixed Charge Coverage (ratio) for 2024, 2025, and 2026.

Fixed Charge Coverage = EBITDA + (Operating Lease) Rent / (Principal Payment + Interest + Main. CAPEX + Dividends+ Rent)

2024 = (3264.6455 + 707) / (16 + 35.77 + 291.2 + 218.80 + 707) = 3.13x

2025 = (3487.9020 + 670) / (14 + 36.55 + 260.4 + 237.4104 + 670) = 3.41x

2026 = (3669.4637 + 544) / (8 + 37.36 + 246.75 + 253.1929 + 544) = 3.86803x

D. Comment on the overall trends from Management's 3-Year Income Statement Forecast, the 3-Year Free Cash Flow Forecast and the 3-Year Fixed Charge Coverage Forecast you prepared above. (3 paragraph minimum)

Income Statement:

The 3-Year Income Statement Forecast from Management paints a pretty optimistic picture. It shows that revenue keeps growing steadily, and the company seems to be handling costs well. Even though expenses are going up a bit, they're still managing to maintain decent profit margins. Operating income is on the rise, which suggests they're running things more efficiently and making more money from their core activities. There's a bit of a bump in interest expenses, though, so they'll need to keep an eye on that to make sure it doesn't eat into their profits too much. Overall, it looks like they're heading in the right direction, with net income steadily climbing and showing that they're making good progress in the market.

Free Cash Flow:

Because of the relatively small decline in asset turnover, the ROE was not significantly affected by the asset turnover. On the other hand, in 2023 the financial leverage rose from 4.80 in 2022 to 5.72. This essentially indicates that Best Buy is now better able to fulfill its long-term debt obligations. Even though the numbers for 2022 and 2023 are similar, the decline in operating income led to an increase in financial leverage, which means they must borrow money to fund their operations.

Fixed Charge Coverage Ratio:

The Fixed Charge Coverage Forecast for Best Buy shows an encouraging trend over the 3-year period, with the ratio increasing from 3.13x in 2024 to 3.86803x in 2026. This indicates an improving ability to cover fixed charges, including interest, principal payments, operating lease rent, and other financial obligations. The upward trend suggests that Best Buy's financial position is strengthening, reflecting enhanced stability and reduced risk of default. A higher Fixed Charge Coverage ratio indicates that Best Buy has more available income to meet its fixed financial commitments, which is a positive signal for investors and creditors alike. Overall, the forecasted increase in Fixed Charge Coverage reflects positively on Best Buy's financial health and ability to manage its fixed obligations effectively

V. 3-Year Financial Forecast - (Team's Base) Case

A. Based upon your independent review (analysis), briefly discuss the current state of the consumer electronics and appliance industry.

Current State of the Consumer Electronics and Appliance Industry.

The global consumer electronics market is on track for significant growth, projected to surge from \$815.16 billion in 2024 to \$1,467.94 billion by 2032, boasting a notable CAGR of 7.63%. This surge is fueled by rising disposable incomes, the increasing prevalence of smart homes, and the expanding millennial demographic. Likewise, the U.S. household appliances market, valued at USD 58.33 billion in 2023, is anticipated to expand at a CAGR of 7.1% from 2024 to 2030. This growth is propelled by higher disposable incomes, rapid urbanization, and a shift towards online purchasing channels. The COVID-19 pandemic has reshaped consumer behavior, emphasized online appliance shopping, and highlighted the importance of home appliances for convenience and efficiency. Cooktops, cooking ranges, microwaves, and ovens dominate the U.S. market, comprising 31.6% of revenue in 2023, with the air conditioner segment also expected to see significant growth. While brick-and-mortar stores presently lead in revenue generation, e-commerce platforms are poised for substantial growth, driven by increased internet penetration and the convenience they offer. The industry is characterized by strategic acquisitions, technological innovations, and regulatory efforts promoting energy efficiency and sustainability, with key players including Whirlpool Corporation, Electrolux AB, LG Electronics, Samsung Electronics Co., Ltd., and Panasonic Corporation. In conclusion, the consumer electronics and appliance industry are positioned for robust growth, driven by technological advancements, evolving consumer preferences, and macroeconomic trends.

B. Given your analysis of Best Buy's historical financial performance (section II above), your projected outlook of the industry, and the additional assumption information below, prepare a forecast of the following income statement variables for 2024, 2025, and 2026 using the required format provided below:

	2024	2025	2026
Revenue Growth	7.00%	5.50%	5.70%
Gross Margin	22.00%	21.10%	21.70%
Selling, General & Admin. Expense (% of Sales)	17.80%	18.10%	18.25%
Interest Expense (% of Sales)	0.10%	0.15%	0.17%

C. Using the information you provided in V.B above and assuming all other income statement variables are the same as the Management Case Forecast (Section IV – i.e. investment income and other, restructure charges; and income tax expense percentage;), prepare a second Income Statement Forecast for 2024, 2025, and 2026.

	2024	2025	2026
Revenue	49,539	52,263	55,243
COGS	38,640	41,236	43,255
Gross Profit	10898.5492	11027.5979	11987.6261
Selling, general and administrative expenses	8817.91708	9459.69301	10081.7593
Restructuring charges	16.4	17.9	18.7
Operating income	2064.23212	1550.00492	1887.16682
Investment income and other	30	33.2	24.6
Interest expense	49.53886	78.395246	93.9122783
EBT	2044.69326	1504.80967	1817.85455
TAX	776.983439	571.827676	690.784727

Net Income	1267.70982	932.981997	1127.06982
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D. Based on the above, prepare a Statement of Free Cash Flows for 2024, 2025, and 2026. Assume all free cash flow variables are the same as the Management Case, except for dividends. You may adjust “the dividends on common stock, as a percentage of net earnings” assumption as you deem appropriate.

	2024	2025	2026
EBITDA	3052.5001	2567.46142	2921.94862
Maintenance CAPEX	291.2	260.4	246.75
DIVIDEND	196.4950	144.61221	174.695822
FREE CASH FLOW	2564.8051	2162.44921	2500.5028

E. Comment on your rationale for the selection of variables above and on the overall financial performance trends from your 3-Year Best Buy Income Statement and Free Cash Flow Forecasts. (3 paragraph minimum)

Variables

We can infer from the additional assumptions that the economy will grow in 2024 and enter a recession in 2025. According to section A's industrial study, the consumer electronics sector is expanding steadily. We first acquired and computed the sales data in order to predict revenue growth. Growth rates and the three-year average from 2021 to 2023 from Best Buy's annual report. Based on the aforementioned information and the knowledge that Best Buy will lose a tiny percentage of its market share in 2024, we ultimately determined that Best Buy's revenue growth rates for 2024 and 2026 are, respectively. Because of the recessionary economy and slower revenue growth in 2025 and 2026, the gross margin will be comparatively smaller. However, we think that overall, the ratio won't be significantly impacted because of how well Best Buy manages its inventories. We computed the mean for the preceding three years and We have merged 2023 with the aforementioned scenario to arrive at our forecasts based on it. We predict that Best Buy's SG&A spend would rise further in 2025 given the current economic climate and the projected rise in electronics costs starting in 2025. We assume that interest expenditure will not change much in 2024 but will grow in 2025 and 2026 since we know from the additional assumptions that the average usage of Best Buy's revolving credit facility will increase in 2025 and 2026. Taking into account the recession by 2025, we think that the Since there won't be a significant increase in the ratio of interest expense to sales, we will use the average of the past three years' ratio as well as the maximum change in these two years.

Income Statement

From the table in Part C, we can see that SG&A expense increases gradually during the forecast period (2024 to 2026), especially in 2024 due to the increase in costs of electronics. Interest expense also increases substantially in 2025 and 2026 compared to 2024 based on the percentage of sales. Although the consumer electronics industry is expected to have stable growth prospects in the future, with a slight increase in revenue each year, the recessionary economic environment and the largely increase in expenses will still result in a significant decrease in net earnings in 2024. The impact will be slightly reduced in 2026, and net earnings will partially recover, but still not as much as in the past two years.

Free Cash Flow Statement

We can see from the table in part D that EBITDA remains strong in 2024, but it has a large decline in 2025 due to the recession and cost increases, and partially recovers in 2026. Although the maintenance CAPEX does not change significantly during the forecast period, the free cash flow in 2025 still decreases significantly as a result of the weaker EBITDA.

VI. Adjusted Financial Analysis (Non-GAAP)

A. Prepare an entire adjusted income statement for fiscal 2022 and fiscal 2023 based on your normalization of the Company's earnings.

	2023	2023
Revenues	46,298	51,761
Gross Profit	9,912	11,640
Gross Profit	9,912	3,005
Investment income and other	9,912	10
Interest Expense	9,912	25
Earning/Loss from Continuing operations before tax	1,935	2,990
Earning/Loss from Continuing operations before tax	735.3	1136.2
Normalized earnings	1,200	1,854

B. List and explain in detail your rationalization for excluding (including) individual items on (not on) the GAAP income statement for each year to arrive at 2022 and 2023 normalized earnings.

We took out the effects of restructuring charges, gains from investment sales, and affiliate income to provide an adjusted income statement for Best Buy. We eliminated restructuring charges and gains from investment sales from the consolidated income statement because they are one-time events. To guarantee that the adjusted income statement gives a normalized picture of Best Buy's financial performance, the income from affiliates—which is equivalent to the earnings produced by the company's subsidiaries—was also removed.

C.1. Calculate the adjusted return on assets (ROA) and adjusted return on equity (ROE) for 2023 (only) based on normalized earnings.

$$\begin{aligned}\text{Adjusted ROE 2023} &= \text{Adjusted Net Income} / \text{Average Total Assets} \\ &= 1200 / 16653.5 \\ &= 0.0720\end{aligned}$$

$$\begin{aligned}\text{Adjusted ROE 2023} &= \text{Adjusted Net Income} / \text{Average Shareholder's Equity} \\ &= 1200 / 2907.5 \\ &= 0.4127\end{aligned}$$

$$\begin{aligned}\text{ROA (GAAP) 2023} &= \text{Net Income} / \text{Average Total Assets} \\ &= 1419 / 16653.5 \\ &= 0.0852\end{aligned}$$

$$\begin{aligned}
 \text{ROE (GAAP) 2023} &= \text{Net Income} / \text{Average Shareholder's Equity} \\
 &= 1419 / 2907.5 \\
 &= 0.4880
 \end{aligned}$$

C.2. Compare and contrast the adjusted ROA and ROE ratios with the GAAP ROA and ROE ratios for 2023

When compared to the GAAP ROA and ROE ratios, the adjusted ROA and ROE ratios in 2023 seem lower. This distinction is reflected in adjusted measures, which exclude specific elements to present a more accurate financial picture, but GAAP measurements adhere to accounting rules. The adjusted ROE of 0.0720, for example, is significantly different from GAAP's 0.4880, suggesting that modifications have had an impact. In a similar vein, the adjusted ROA (0.0720) is less than the GAAP-reported 0.0852, indicating that these have an effect on assessments of asset usage as well as profitability. This emphasizes how important it is to comprehend modifications in financial analysis.

D. Based on the information above, calculate Best Buy's sustainable operating cash flow for 2023 and 2022, respectively.

	2023	2022
Operating activities		
net earnings	1,419	2,454
Adjustments:		
Addition		
Income tax refund	7.4	
Pension plan	15.6	
Insurance payment	3.7	
Consulting fees		2.2
Restructuring	19	25
Subtract		
Lawsuit	4.3	
Account receivable		15
Inventory increase		35.5
Trading securities		7.2
Operating Cash Flow	1460.4	2423.5

