Financial Statement Analysis

Spring 2023

Case - Kimberly-Clark and the Consumer Products Industry

I. Assessment of Financial Distress.

A. Altman Z Score.

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

2022 Altman Z score = 1.2 x -0.089 + 1.4 x 0.45 + 3.3 x 0.15 + 0.6 x 5.43 + 1.0 x 1.12
= 5.41

2021 Altman Z score = 1.2 x -0.0664 + 1.4 x 0.44 + 3.3 x 0.14 + 0.6 x 5.33 + 1.0 x 1.08
= 5.30

Calculations for Altman Z Score

		2022	2021
X1	Working Capital/Total Assets	-0.08932	-0.06638
X2	Retained Earnings/ Total Assets	0.45637	0.44054
X3	EBIT/Total Assets	0.14919	0.14358
X4	Market value of Equity/Book value of Debt	5.43938	5.33302
X5	Sales/Total Assets	1.12270	1.08987

B. Significance of the Altman Z Score

- The Altman Z-score ranges from 0 to 10, with scores
  - Below 1.8 indicates a high risk of bankruptcy,
  - Scores between 1.8 and 3.0 indicate a gray area that requires further analysis, and
  - Scores above 3.0 indicate a low risk of bankruptcy.
- Kimberly-Clark has an Altman Z-score of 5.41 which is well above the 3.0 threshold, which means that the company is financially healthy and is less likely to go bankrupt in the near future.

II. Analysis of Historical Operating Performance.

A. Year-to-year trend analysis

Particulars	2022	2021	Amount Change ($)	% Change
Net Sales	20175	19440	735	3.78%
Gross Profit	6219	5988	231	3.86%
Operating Income	2681	2561	120	4.69%
EBIT	2340	2225	115	5.17%
Interest Expense	282	256	26	10.16%
Net Income	1961	1844	117	6.34%
EBDITA	3094	2991	103	3.44%

B. Profitability Ratios

Ratios	2022	2021
Gross Margin	30.83%	30.80%
Operating Margin	13.29%	13.17%
EBIT Margin	11.60%	11.45%
Interest Coverage	8.30	8.69
Net Margin	9.72%	9.49%
EBDITA Margin	15.34%	15.39%

C. Kimberly Clarks Financial Performance.

- There has been an overall performance increase in the metrics of the company financials. The performance has improved both in $ terms and in % profitability ratios as well.
- The net revenue growth was by ~3.78% but the net income positive change was around 6.34% which shows that the company is improving on its net income margins.
- There can be seen as an increase in interest expenses due to the classification of interest rate swaps for derivative instruments.
- The company saw a gradual increase in sales for its 3 all major segments(Personal care, consumer tissue, and K-C Professional), however, there was a minor decrease in Corporate & other segments.
- The profitability of the Personal care and Consumer tissue segment has seen a decrease which is a result of increased supply chain problems and increased cost of raw materials.
- The company is increasing its expenditure in marketing and innovation for a better penetration in the markets.
- There is also a small competition faced by Kimberly Clark with new entrants in the market, however, there is no major effect on the market share of the company.
- There has been a one-time major expense related to 2018 Global restructuring program classified under Corporate & Other which has an effect on the operating profit.
- The company as also seen an $ 85 mil of non-cash, non-recurring gain for the acquisition of Thinx Inc shares.

III. Financial Position and ROE (Du-Pont) Analysis

A. Kimberly-Clark' Return on Equity (ROE) for 2022 and 2021 using the 3-step DuPont model

1. Calculation of ROW for 2022 and 2021 using DuPont

$$\text{3 step DuPont} = \frac{\text{Net Income}}{\text{Net Revenue.}} \times \frac{\text{Net Revenue}}{\text{Avg Total Asset.}} \times \frac{\text{Avg Total Assets}}{\text{Avg. Shareholders Equity}}$$

($ in millions)	2022	2021
Revenue	20175	19440
Net Income	1961	1844
Avg total assets	17903.5	17680
Avg total equity	530.5	570

ROE (DuPont) for 2022 = 3.70

ROE (DuPont) for 2021 = 3.24

2. Key Factors driving changes in ROE.

a. The increase in sales by 3.78% from 2021 to 2022 is one of the primary reasons driving the change in ROE.
b. The net income margin has shown an improvement of 6.34%
c. The interest coverage has come down from 7.71x to 7.35x.
d. There is a decrease in total stockholder's equity by $ 112 million but that factor is compensated in ROE calculation by the increase in Net sales, Net Income and Average total assets.

B. Liquidity Position commenting as on December 31, 2022

Liquidity Position as of December 31, 2022	
Current Ratio	0.78
Working Capital	$ (1,605.00)
Quick Ratio	0.37
Cash Ratio	0.06
cash flow ratio	0.37

- The current ratio of the company stands at 0.78 x which signifies that the company may have difficulty in meeting its short-term obligations using its current assets.
- The negative working capital of $1605 million signifies that the company may have difficulties in serving its short-term obligations which may result in defaulting on loan repayments.
- With all the above-mentioned liquidity ratios it seems that the company may have difficulties in fulfilling its short-term obligations, however, the company has ample resources to fulfill its short-term obligations.

<u>Commercial Paper Program (CP)</u>

- The company has a commercial paper program of $ 2.75 billion with the below 2 revolving lines of credit which are fully unutilized at their disposal.
  - $ 2 billion Revolving credit line expiring June 2026
  - $ 775 million revolving credit line expiring June 2023.
- This CP revolving credit line facility has same-day availability and no material borrowing restriction which makes Kimberly Clark in a better liquidity position.
- The cash flow generated from increased sales and increased product prices would also help in operating cash flows.
- The subsidiary company of Kimberly Clark in Central America has outstanding redeemable preferred securities that are held by a non-controlling interest.

C. Kimberly Clarks capital Structure and Enterprise Value

1. Capital Structure

For 2022,

Total debt = $7528 + $ 844 = $ 8422

Total Debt-to-Total Capital ratio = Total (Interest Bearing) Debt / [Total debt + total shareholder Equity]

=0.94

Total Debt/EBITDA = Total (Interest Bearing) Debt / EBITDA

= $8422 / 3435

=2.45

For 2021,

Total debt = $8141 + $ 433 = $ 8574

Total Debt-to-Total Capital ratio = Total (Interest Bearing) Debt / [Total debt + total shareholder Equity]

= $ 8574 / [$ 8574 + 547]

=0.95

Total Debt/EBITDA = Total (Interest Bearing) Debt / EBITDA

= $ 8574 / 3327

= 2.58

- The Total Debt-to-Total Capital ratio measures a company's debt relative to its total capital structure, including both debt and equity. It shows the proportion of the company's capital structure that is financed by debt.
- Kimberly Clark's total debt-to-capital stands at 0.94 and 0.95 for 2022 and 2021 respectively, which shows that the company has less debt compared to its capital.
- The total Debt/EBITDA ratio compares a company's total debt to its EBITDA. It provides an indication of how many years it would take a company to repay its debt based on its current level of earnings.
- For Kimberly Clark the total debt/EBDITA is 2.45 years and 2.58 years for 2022 and 2021 respectively.
- It shows that the company would take 2.45 years to pay off its debts as per 2022 ratio and it would take 2.58 years to pay off its debts as per 2021 ratios.

2. Enterprise Value as on December 31, 2022

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

Market Value Equity = Shares Outstanding X Share Price
= 337,462 X 135.75
= 45,810,467 = $ 45.810 million
Market Value of Debt = Book Value of Debt X % Trading Value
= 8422 X 96%
= $ 8085.12 million

Enterprise Value = Market Value of Equity + Market Value of Debt
= 45.810 + 8085.12
= $ 8130.93 million

D. Kimberly-Clark's property, plant and equipment at December 31, 2022.

1.The average total life span of fixed Assets = Ending Gross Property, Plant & Equipment /Depreciation Expense
=18549 / 754
= 24.9 Years

2. Average Age of Fixed assets = Accumulated Depreciation / Depreciation Expense
= 10664 / 754
= 14.15 Years

- Kimberly Clark's average total life span of fixed assets is derived at 24.9 years
- The average age of fixed assets is derived at 14.15 years.

IV. 3-year Financial Forecast – Management Case

A. Income Statement Forecast for 2023, 2024, 2025

Income Statement Forecasting			
Particulars	2023	2024	2025
Net Sales	20659.20	21196.34	21811.03
COGS	14243.4	14565.0	14937.2
Gross Margin	31.06%	31.29%	31.52%
Gross Profit	6415.8	6631.3	6873.8
Marketing & oth exps	3733.1	3830.2	3941.3
Other (Income)/expense	37.0	-44.0	68.0
Operating Income	2645.6	2845.1	2864.5
Non operating exp	35.0	40.0	36.0
Interest Income	0	0	0
Interest Expense	283.97	285.96	287.96
Income before Taxes	2326.7	2519.2	2540.6
Provision for Income Tax	884.1	957.3	965.4
Net Income	1442.5	1561.9	1575.2

B. Statement of Free Cash Flow for 2023, 2024, 2025

	2023	2024	2025
EBDITA	3422.26	3645.06	3688.45
Less:			
Maintenance CAPEX	380	450	360
Dividends	504.89	546.66	551.30
Free Cash Flow	2537.37	2648.40	2777.15

C. Fixed Charge Coverage Ratio for 2023, 2024 and 2025

	2023	2024	2025
Commercial Debt	472	524	550
Op. Lease	138	119	100
EBDITA + Op rent	3560.26	3764.06	3788.45
Denominator	1640.86	1806.62	1749.27
FCC	2.1698	2.0835	2.1657

D. Commenting on forecasting.

- Managements 3-year Income Forecast
  - The company is seeing steady growth in sales and also a steady increase in gross profit margins.
  - The largest expense of Cost of goods Sold (COGS) is increasing by minute amount resulting in better gross margins.
  - The company can achieve a net profit margin of > 7% for the next 3 years with growth in sales and a minor increase in interest expenses.

- Free Cash Flow Forecast
  - The company is generating enough free cash flow to operate its business efficiently and effectively.
  - Even after paying dividends and maintenance CAPEX from EBDITA, the company is left with enough cash to run its operations smoothly.

- Fixed Charge Coverage Forecast
  - An FCC of 2.10 means that the company's operating income is sufficient to cover its fixed charges 2.10 times over.
  - It is a good sign because it indicates that the company is generating enough cash to cover its fixed expenses and has a comfortable margin of safety.

V. 3- year Financial Forecast

A. **Personal care consumer industry Independent review**

Consumer goods firms face a shifting geopolitical and commercial climate as they strive to secure the inputs and commodities they demand. Governmental limitations on technology transfer, tense ties between the world's top countries, and growth in supply chain regionalization are all part of this. It also involves new efforts by multinational corporations to increase the redundancy and resilience of the supply chain, in part through diversifying the supply chain's operational procedures and reducing reliance on a single nation or provider. As a result, a new, in many ways more varied consumer products business may start to take shape.

Profitable growth companies are :
1. Embracing the changing consumer.
2. Going for market share.
3. Creatively transforming.
4. Driving data through the supply chain.
5. Prioritizing ESG

B. **Assumptions as per the above industry outlook and additional assumptions provided in the case study.**

	2023	2024	2025
Sales Growth	3.78%	2.50%	3.50%
Gross Margin	30.00%	29.80%	30.20%
Marketing research & General expense	17.75%	17.75%	17.75%
Interest Expense	1.50%	1.50%	1.50%

C. **Income Statement Forecasting using the above variables.**

($ in millions)			
Particulars	2023	2024	2025
Net Sales	20937.62	21461.06	22212.19
COGS	14656.3	15065.7	15504.1
Gross Margin	30.00%	29.80%	30.20%
Gross Profit	6281.3	6395.4	6708.1
Marketing & oth exps	3716.4	3809.3	3942.7
Other (Income)/expense	37.0	-44.0	68.0
Operating Income	2527.9	2630.1	2697.4
Non-operating exp	35.0	40.0	36.0
Interest Income	0	0	0
Interest Expense	314.06	321.92	333.18
Income before Taxes	2178.8	2268.1	2328.2
Provision for Income Tax	827.9	861.9	884.7
Net Income	1350.9	1406.2	1443.5

D. Statement of Free Cash Flow using the above variables.

	2023	2024	2025
EBDITA	3304.48	3429.98	3521.33
Less:			
Maintenance CAPEX	380	450	360
Dividends	506.57	527.34	541.31
Free Cash Flow	2417.91	2452.63	2620.02

E. **Rationale for selection of variables.**

- The sales growth is kept constant for 2023 as 2022. Since an economic recession is forecasted for 2024, negative growth is forecasted for that period. For the recovery period of 2025 sales growth of 3.5% is expected.
- Due to increased costs of raw materials in 2023 and 2024 there is a decrease in gross margins.
- There will be an increase in interest costs due to higher usage of revolving credit facilities in the coming years.

VI. **Adjusted Financial Analysis (Non-GAAP)**

A. Adjusted Income Statement for fiscal 2022 and 2021

($ in millions)	2022	2021
Net sales	20175	19440
Gross Profit	6219	5988
Operating Profit	2638	2589
Interest Income	14	6
Interest Expense	282	256
Earning/loss from continuing operation before taxes	2906	2839
Provision for taxes	1104.28	1078.82
Earnings from continuing operating	1801.72	1760.18
Net earnings	1801.7	1760.2

B. **Rationalization**

We have excluded the below 2 items for normalization of earnings.

- Other (income) and expense, net.
  - The other income generated in fiscal 2022 includes a non-cash, non-recurring gain of $ 85 million related to the acquisition of a controlling stake in “Thinx Inc” and it also includes a tax credit of $ 77 million related to a favorable ruling resolved certain matters related to prior years.
- Nonoperating expense.
  - As a result of restructuring actions related to the 2018 Global Restructuring Program, aggregate pension settlement charges from prior years were classified under nonoperating expenses.

C. 1. **Adjusted return on assets (ROA) and adjusted return on equity (ROE) for 2022 (only) based on normalized earnings.**

ROE = Net Income/ Avg Shareholders Equity
ROA = Net Income / Avg Total Assets

	2022	GAAP 2022
ROE	3.69	3.39
ROA	0.109	0.1

C. 2. **Compare and contrast the adjusted ROA and ROE ratios with the GAAP ROA and ROE ratios for 2022**

As we can see, both the adjusted ROE and ROA ratios are higher than the GAAP ROA and ROE ratios for 2022. There are two factors that could have contributed to this increase i.e. Other (income) and expense, net. , Nonoperating expense.

D. Sustainable operating cash flow for 2021 and 2022

For Year 2021,
The company's reported operating cash flow is $2730 million.

Reported operating cash flow: $2730 million.

(+)Addition:

- $16 million (cash proceeds obtained from the sales of accounts receivable as an operating cash inflow)

(-)Subtraction:

- $32.0 million restructuring charge.
- $13.7 million increase in inventory.
- $ 5.1 million in consulting.

Therefore, the Sustainable operating cash flow for 2021 = $ 2695.2 million

For the Year 2022,
The company's reported operating cash flow is $2733 million.

Reported operating cash flow: $2733 million.

Addition:

- $3.6 million annual insurance payment.

Subtraction:

- $7.8 million additional income tax payment
- $15.0 million additional pension plan contribution.
- $4.8 million cash payment related to the settlement of a pending lawsuit.

Therefore, the Sustainable operating cashflow for 2022 = $ 2709 million