3-Statement Modeling

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Model Checks

Model Exceeding Operational Capacity?	No
Unused Tax Losses Remaining?	No
Balance Sheet Unbalanced?	No

Model Circularity

Model Circularity Off

The data that are in blue colour are hard-coded and fictitious numbers provided by Corporate Finance Institute (CFI) as a part of learning.
The entire model is prepared following the international best practices in 3-statement modelling that I learned during my professional certification from CFI.

Prepared By: Sanjeeb Bhatta

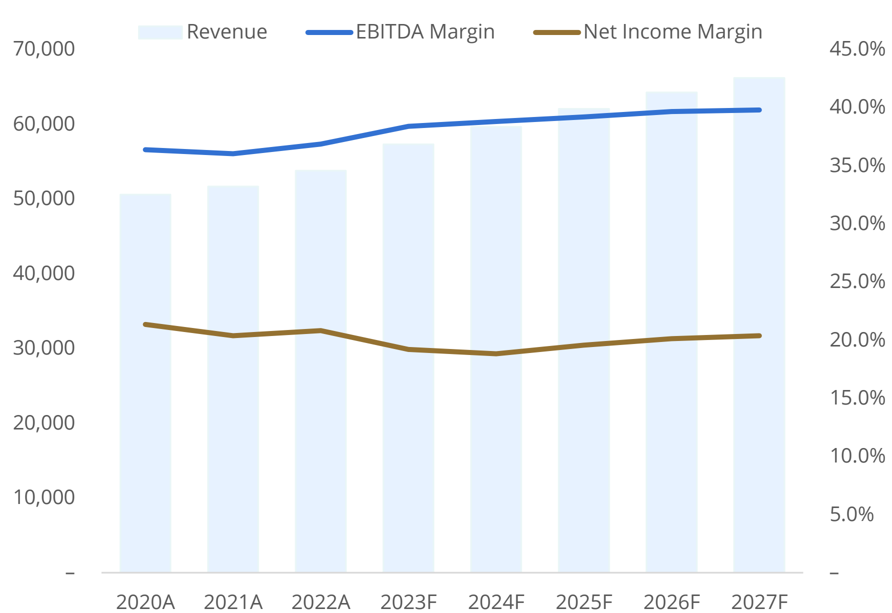
Dashboard: Charts & Graphs

All figures in USD thousands unless stated

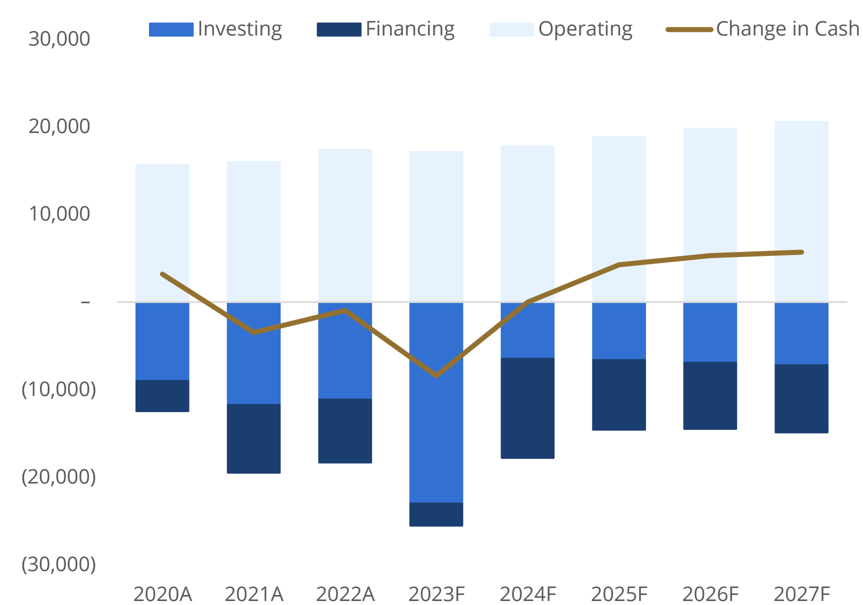
Driver Switch Best Case

	2020A	2021A	2022A	2023F	2024F	2025F	2026F	2027F
INCOME STATEMENT								
Revenue	50,589	51,648	53,761	57,312	59,627	62,036	64,226	66,167
EBITDA	18,404	18,607	19,811	22,000	23,132	24,317	25,462	26,328
EBITDA Margin	*36.4%*	*36.0%*	*36.9%*	*38.4%*	*38.8%*	*39.2%*	*39.6%*	*39.8%*
Net Income	10,801	10,530	11,190	11,001	11,225	12,137	12,919	13,484
Net Income Margin	*21.3%*	*20.4%*	*20.8%*	*19.2%*	*18.8%*	*19.6%*	*20.1%*	*20.4%*
CASH FLOW STATEMENT								
Operating	15,656	16,012	17,391	17,134	17,797	18,830	19,798	20,594
Investing	(9,015)	(11,733)	(11,130)	(23,000)	(6,450)	(6,600)	(6,900)	(7,200)
Financing	(3,465)	(7,761)	(7,216)	(2,544)	(11,347)	(7,982)	(7,584)	(7,697)
Change in Cash	3,176	(3,482)	(955)	(8,410)	–	4,248	5,314	5,697

INCOME STATEMENT



CASH FLOW STATEMENT



Drivers

All figures in USD thousands unless stated

Driver Switch Best Case

	2023F	2024F	2025F	2026F	2027F
Sales Volume Growth	**3.0%**	**2.0%**	**2.0%**	**1.5%**	**1.5%**
Best Case	3.0%	2.0%	2.0%	1.5%	1.5%
Base Case	2.0%	1.0%	1.0%	0.5%	0.5%
Worst Case	1.0%	1.0%	0.5%	0.5%	0.5%
Pricing Increases	**3.5%**	**2.0%**	**2.0%**	**2.0%**	**1.5%**
Best Case	3.5%	2.0%	2.0%	2.0%	1.5%
Base Case	3.0%	1.0%	1.0%	1.0%	0.5%
Worst Case	1.0%	1.0%	0.5%	0.5%	0.5%
Capital Expenditure	**23,000**	**6,450**	**6,600**	**6,900**	**7,200**
Best Case	23,000	6,450	6,600	6,900	7,200
Base Case	25,475	7,050	7,275	7,200	7,688
Worst Case	27,500	7,800	8,100	8,250	8,400

Other Inputs

All figures in USD thousands unless stated

		2023F	2024F	2025F	2026F	2027F
Working Capital						
Accounts Receivable	*(Days)*	45	45	45	45	45
Inventory	*(Days)*	25	25	25	25	25
Accounts Payable	*(Days)*	40	40	40	40	40
Other Annual Inputs						
Inflation Rate		3.5%	3.0%	3.0%	2.5%	2.5%
Term Debt	*Increase / (Decrease)*	(4,000)	(4,000)	(4,000)	(4,000)	(4,000)
Common Equity	*Increase / (Decrease)*	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)

Dates

First Year of Forecast	*(YYYY)*	2023
Days in Period		365

Other Single Inputs

Plant Capacity	*(Units/Day)*	1,600
Dividend Payout Ratio		20%

Interest Rates

Cash Balances	1.0%
Revolving Credit Line	5.0%
Long Term Debt	6.0%

Taxes

Tax Rate		30%
First Year Tax Depreciation		50%
Blended Tax Depreciation Rate		15.0%
Tax Basis for Assets	*(End of 2022)*	39,211
Tax Losses	*(End of 2022)*	2,657

Depreciation

First Year Accounting Depreciation		50%
Useful Life: Existing Assets	*(Years)*	16.00
Useful Life: New Assets	*(Years)*	20.00

Income Statement

All figures in USD thousands unless stated	2020A	2021A	2022A	2023F	2024F	2025F	2026F	2027F
Model Running: Best Case Drivers								
Inflation	2.4%	2.2%	2.3%	3.5%	3.0%	3.0%	2.5%	2.5%
Revenue	50,589	51,648	53,761	57,312	59,627	62,036	64,226	66,167
COGS	(24,544)	(25,104)	(25,779)	(26,856)	(27,785)	(28,749)	(29,569)	(30,414)
Gross Profit	**26,045**	**26,544**	**27,981**	**30,456**	**31,842**	**33,287**	**34,657**	**35,753**
SG&A	(5,877)	(6,006)	(6,144)	(6,359)	(6,550)	(6,746)	(6,915)	(7,088)
Other	(1,764)	(1,931)	(2,026)	(2,097)	(2,160)	(2,225)	(2,280)	(2,337)
EBITDA	**18,404**	**18,607**	**19,811**	**22,000**	**23,132**	**24,317**	**25,462**	**26,328**
Depreciation	(2,960)	(3,196)	(3,452)	(5,288)	(6,024)	(6,350)	(6,688)	(7,040)
EBIT	**15,444**	**15,411**	**16,359**	**16,712**	**17,108**	**17,966**	**18,774**	**19,288**
Interest Expense	(1,688)	(2,200)	(2,350)	(1,080)	(1,073)	(628)	(360)	(120)
Interest Income	200	180	193	84	–	–	42	96
EBT	**13,956**	**13,391**	**14,202**	**15,716**	**16,035**	**17,338**	**18,456**	**19,263**
Current Tax	–	–	–	(3,222)	(4,015)	(4,601)	(5,110)	(5,505)
Deferred Tax	(3,155)	(2,861)	(3,012)	(1,493)	(795)	(600)	(427)	(274)
Total Tax	(3,155)	(2,861)	(3,012)	(4,715)	(4,811)	(5,202)	(5,537)	(5,779)
Net Income	**10,801**	**10,530**	**11,190**	**11,001**	**11,225**	**12,137**	**12,919**	**13,484**

Cash Flow Statement

All figures in USD thousands unless stated
Model Running: Best Case Drivers

	2020A	2021A	2022A	2023F	2024F	2025F	2026F	2027F
CASH FROM OPERATING								
Net Income	10,801	10,530	11,190	11,001	11,225	12,137	12,919	13,484
Deferred Taxes	3,155	2,861	3,012	1,493	795	600	427	274
Depreciation	2,960	3,196	3,452	5,288	6,024	6,350	6,688	7,040
Cash From Accounts Receivable	(600)	(625)	(291)	(442)	(285)	(297)	(270)	(239)
Cash From Inventory	(400)	(131)	(86)	170	(64)	(66)	(56)	(58)
Cash From Accounts Payable	(260)	181	114	(376)	102	106	90	93
Subtotal	15,656	16,012	17,391	17,134	17,797	18,830	19,798	20,594
CASH FROM INVESTING								
Capital Expenditure	(9,015)	(11,733)	(11,130)	(23,000)	(6,450)	(6,600)	(6,900)	(7,200)
Subtotal	(9,015)	(11,733)	(11,130)	(23,000)	(6,450)	(6,600)	(6,900)	(7,200)
CASH FROM FINANCING								
Change in Long-Term Debt	-	(4,000)	(4,000)	(4,000)	(4,000)	(4,000)	(4,000)	(4,000)
Change in Revolving Credit Line	-	-	-	4,657	(4,102)	(555)	-	-
Change in Common Equity	-	-	-	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Dividends	(3,465)	(3,761)	(3,216)	(2,200)	(2,245)	(2,427)	(2,584)	(2,697)
Subtotal	(3,465)	(7,761)	(7,216)	(2,544)	(11,347)	(7,982)	(7,584)	(7,697)
CASH BALANCE								
Beginning of the Year	9,671	12,847	9,365	8,410	-	-	4,248	9,562
Increase / (Decrease)	3,176	(3,482)	(955)	(8,410)	-	4,248	5,314	5,697
End of the Year	**12,847**	**9,365**	**8,410**	**-**	**-**	**4,248**	**9,562**	**15,259**

Balance Sheet

All figures in USD thousands unless stated	2020A	2021A	2022A	2023F	2024F	2025F	2026F	2027F
Model Running: Best Case Drivers								
ASSETS								
Cash	12,847	9,365	8,410	–	–	4,248	9,562	15,259
Accounts Receivable	5,708	6,333	6,624	7,066	7,351	7,648	7,918	8,158
Inventories	1,792	1,923	2,009	1,839	1,903	1,969	2,025	2,083
Total Current Assets	20,347	17,621	17,043	8,905	9,254	13,865	19,506	25,500
Property Plant & Equipment	59,192	67,729	75,407	93,119	93,545	93,794	94,007	94,166
Total Assets	**79,539**	**85,350**	**92,450**	**102,024**	**102,799**	**107,660**	**113,512**	**119,666**
LIABILITIES								
Accounts Payable	3,024	3,205	3,319	2,943	3,045	3,151	3,240	3,333
Revolving Credit Line	–	–	–	4,657	555	–	–	–
Total Current Liabilities	3,024	3,205	3,319	7,600	3,600	3,151	3,240	3,333
Deferred Taxes	4,155	7,016	10,028	11,521	12,316	12,916	13,343	13,617
Long-Term Debt	28,000	24,000	20,000	16,000	12,000	8,000	4,000	-
Total Liabilities	35,179	34,221	33,347	35,121	27,916	24,067	20,584	16,950
EQUITY								
Common Equity	38,670	38,670	38,670	37,670	36,670	35,670	34,670	33,670
Retained Earnings	5,690	12,459	20,433	29,234	38,214	47,923	58,259	69,046
Total Shareholders' Equity	44,360	51,129	59,103	66,904	74,883	83,593	92,928	102,716
Total Liabilities & Equity	**79,539**	**85,350**	**92,450**	**102,024**	**102,799**	**107,660**	**113,512**	**119,666**
Check	–	–	–	–	–	–	–	–

Revenue Schedule

All figures in USD thousands unless stated
Model Running: Best Case Drivers

		2020A	2021A	2022A	2023F	2024F	2025F	2026F	2027F
OPERATIONS									
Sales Volume Growth			0.1%	2.1%	3.0%	2.0%	2.0%	1.5%	1.5%
Sales Volume	*(Units/Day)*	1,400	1,401	1,430	1,473	1,502	1,532	1,555	1,579
Plant Capacity	*(Units/Day)*	1,500	1,500	1,500	1,600	1,600	1,600	1,600	1,600
Operational Efficiency		93.3%	93.4%	95.3%	92.1%	93.9%	95.8%	97.2%	98.7%
VOLUME									
Days in Period		365	365	365	365	365	365	365	365
Sales Volume	*(Units/Day)*	1,400	1,401	1,430	1,473	1,502	1,532	1,555	1,579
Sales Volume	*(Units)*	511,000	511,365	521,950	537,609	548,361	559,328	567,718	576,234
PRICING									
Pricing Increases			2.0%	2.0%	3.5%	2.0%	2.0%	2.0%	1.5%
Unit Price	*(USD/Unit)*	99.00	101.00	103.00	106.61	108.74	110.91	113.13	114.83
REVENUE									
Sales Volume	*(Units)*	511,000	511,365	521,950	537,609	548,361	559,328	567,718	576,234
Sales Price	*(USD/Unit)*	99.00	101.00	103.00	106.61	108.74	110.91	113.13	114.83
Revenue		50,589	51,648	53,761	57,312	59,627	62,036	64,226	66,167
Operational Capacity Exceeded?		No	No	No	No	No	No	No	No

Cost Schedule

All figures in USD thousands unless stated		2020A	2021A	2022A	2023F	2024F	2025F	2026F	2027F
Model Running: Best Case Drivers									
Sales Volume		511,000	511,365	521,950	537,609	548,361	559,328	567,718	576,234
Inflation		2.4%	2.2%	2.3%	3.5%	3.0%	3.0%	2.5%	2.5%
VARIABLE COSTS									
Materials	*(USD/Unit)*	9.50	9.72	9.91	10.26	10.56	10.88	11.15	11.43
Packaging	*(USD/Unit)*	0.80	0.84	0.86	0.89	0.92	0.94	0.97	0.99
Subtotal		10.30	10.56	10.77	11.15	11.48	11.83	12.12	12.42
Materials		4,855	4,970	5,173	5,514	5,793	6,086	6,332	6,588
Packaging		409	430	449	479	503	528	550	572
Subtotal		5,263	5,400	5,621	5,993	6,296	6,614	6,882	7,159
FIXED COSTS									
Labor	*(USD/Unit)*	30.59	31.24	31.31	31.46	31.77	32.08	32.40	32.71
Utilities	*(USD/Unit)*	7.14	7.30	7.31	7.35	7.42	7.49	7.57	7.64
Subtotal		37.73	38.53	38.62	38.81	39.19	39.57	39.96	40.36
Labor		15,630	15,973	16,341	16,913	17,420	17,943	18,392	18,851
Utilities		3,651	3,731	3,817	3,951	4,069	4,191	4,296	4,403
Subtotal		19,281	19,704	20,158	20,864	21,489	22,134	22,687	23,255
SUMMARY									
Variable Costs	*(USD/Unit)*	10.30	10.56	10.77	11.15	11.48	11.83	12.12	12.42
Fixed Costs	*(USD/Unit)*	37.73	38.53	38.62	38.81	39.19	39.57	39.96	40.36
Total Costs	*(USD/Unit)*	48.03	49.09	49.39	49.95	50.67	51.40	52.08	52.78
Variable Costs		5,263	5,400	5,621	5,993	6,296	6,614	6,882	7,159
Fixed Costs		19,281	19,704	20,158	20,864	21,489	22,134	22,687	23,255
Total Costs		24,544	25,104	25,779	26,856	27,785	28,749	29,569	30,414

Working Capital Schedule

All figures in USD thousands unless stated		2020A	2021A	2022A	2023F	2024F	2025F	2026F	2027F
Model Running: Best Case Drivers									
Days in Period		365	365	365	365	365	365	365	365
Revenue		50,589	51,648	53,761	57,312	59,627	62,036	64,226	66,167
COGS		24,544	25,104	25,779	26,856	27,785	28,749	29,569	30,414
AMOUNTS PER DAY									
Accounts Receivable	*(Days)*	41	45	45	45	45	45	45	45
Inventory	*(Days)*	27	28	28	25	25	25	25	25
Accounts Payable	*(Days)*	45	47	47	40	40	40	40	40
TOTAL AMOUNTS									
Accounts Receivable		5,708	6,333	6,624	7,066	7,351	7,648	7,918	8,158
Inventory		1,792	1,923	2,009	1,839	1,903	1,969	2,025	2,083
Accounts Payable		3,024	3,205	3,319	2,943	3,045	3,151	3,240	3,333

		2021A	2022A	2023F	2024F	2025F	2026F	2027F
CASH CHANGES								
Accounts Receivable		(625)	(291)	(442)	(285)	(297)	(270)	(239)
Inventory		(131)	(86)	170	(64)	(66)	(56)	(58)
Accounts Payable		181	114	(376)	102	106	90	93
Cash from Working Capital Items		(575)	(263)	(648)	(247)	(257)	(236)	(205)

Depreciation Schedule

All figures in USD thousands unless stated
Model Running: Best Case Drivers

	2022A	2023F	2024F	2025F	2026F	2027F
Capital Expenditure		23,000	6,450	6,600	6,900	7,200

EXISTING ASSETS [1]

Useful Life	*(Years)*	16.00
PP&E	*(End of 2022)*	75,407

Percent of Full Year				
Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
100%	100%	100%	100%	100%

NEW ASSETS [1]

Useful Life	*(Years)*	20.00
First Year Amount		50%

		Percent of Full Year				
Year	Life	2023F	2024F	2025F	2026F	2027F
2023F	20.00	50%	100%	100%	100%	100%
2024F	20.00	–	50%	100%	100%	100%
2025F	20.00	–	–	50%	100%	100%
2026F	20.00	–	–	–	50%	100%
2027F	20.00	–	–	–	–	50%

			Amounts for Depreciation				
Year	Capex	Per Yr	2023F	2024F	2025F	2026F	2027F
2023F	23,000	1,150	575	1,150	1,150	1,150	1,150
2024F	6,450	323	–	161	323	323	323
2025F	6,600	330	–	–	165	330	330
2026F	6,900	345	–	–	–	173	345
2027F	7,200	360	–	–	–	–	180

TOTAL ASSET DEPRECIATION [2]

	2023F	2024F	2025F	2026F	2027F
Existing Assets	4,713	4,713	4,713	4,713	4,713
New Assets	575	1,311	1,638	1,975	2,328
Total Depreciation	5,288	6,024	6,350	6,688	7,040

All PP&E and capital expenditure is assumed depreciable (i.e. no land balance). [(1)]
This schedule calculates depreciation on a straight-line basis. [(2)]

Asset Schedule

All figures in USD thousands unless stated
Model Running: Best Case Drivers

	2022A	2023F	2024F	2025F	2026F	2027F
Capital Expenditure		23,000	6,450	6,600	6,900	7,200

First Year Tax Depreciation	50%
Blended Tax Depreciation Rate	15.0%

	2022A	2023F	2024F	2025F	2026F	2027F
PROPERTY PLANT & EQUIPMENT [1]						
Beginning		75,407	93,119	93,545	93,794	94,007
Capital Expenditure		23,000	6,450	6,600	6,900	7,200
Accounting Depreciation		(5,288)	(6,024)	(6,350)	(6,688)	(7,040)
Ending	75,407	93,119	93,545	93,794	94,007	94,166
TAX BASIS [1]						
Beginning		39,211	54,604	52,380	50,628	49,416
Capital Expenditure		23,000	6,450	6,600	6,900	7,200
Tax Depreciation		(7,607)	(8,674)	(8,352)	(8,112)	(7,952)
Ending	39,211	54,604	52,380	50,628	49,416	48,664

Model assumes no dispositions that would impact the PP&E or the Tax Basis. [1]

Income Tax Schedule

All figures in USD thousands unless stated
Model Running: Best Case Drivers

	2022A	2023F	2024F	2025F	2026F	2027F
Earnings Before Tax (EBT)		15,716	16,035	17,338	18,456	19,263
Profitable Before Taxes?		Yes	Yes	Yes	Yes	Yes

Tax Rate	30%
Unused Tax Losses Remaining?	No

	2022A	2023F	2024F	2025F	2026F	2027F
ADJUSTMENT FOR DEPRECIATION						
EBT		15,716	16,035	17,338	18,456	19,263
Add: Accounting Depreciation		5,288	6,024	6,350	6,688	7,040
Less: Tax Depreciation		(7,607)	(8,674)	(8,352)	(8,112)	(7,952)
EBT After Adjustment		13,397	13,385	15,337	17,033	18,351
ADJUSTMENT FOR TAX LOSSES [1]						
EBT After Adjustment		13,397	13,385	15,337	17,033	18,351
Less: Use of Tax Losses [2]		(2,657)	–	–	–	–
Taxable Income		10,740	13,385	15,337	17,033	18,351
TAX LOSSES						
Beginning		2,657	–	–	–	–
Add: New Losses		–	–	–	–	–
Less: Use of Tax Losses		(2,657)	–	–	–	–
Ending	2,657	–	–	–	–	–
TAXES						
Current Taxes		3,222	4,015	4,601	5,110	5,505
Deferred Taxes		1,493	795	600	427	274
Total Taxes		4,715	4,811	5,202	5,537	5,779

This schedule assumes that tax losses can be carried forward indefinitely into the future. [1]
This schedule assumes losses do not carry back to previous periods to reduce taxable income. [2]

Debt Schedule: Part 1

All figures in USD thousands unless stated
Model Running: Best Case Drivers

CASH

		2022A	2023F	2024F	2025F	2026F	2027F
Beginning Balance			8,410	–	–	4,248	9,562
Increase / (Decrease)			(8,410)	–	4,248	5,314	5,697
Ending Balance		8,410	–	–	4,248	9,562	15,259
Interest Rate	**Circularity**		1.0%	1.0%	1.0%	1.0%	1.0%
Interest Income	Off		84	–	–	42	96

LONG TERM DEBT

	2022A	2023F	2024F	2025F	2026F	2027F
Beginning Balance		20,000	16,000	12,000	8,000	4,000
Increase / (Decrease)		(4,000)	(4,000)	(4,000)	(4,000)	(4,000)
Ending Balance	20,000	16,000	12,000	8,000	4,000	–
Interest Rate		6.0%	6.0%	6.0%	6.0%	6.0%
Interest Expense		1,080	840	600	360	120

Debt Schedule: Part 2

All figures in USD thousands unless stated
Model Running: Best Case Drivers

		2022A	2023F	2024F	2025F	2026F	2027F
AVAILABLE CASH							
Beginning Cash Balance			8,410	–	–	4,248	9,562
Cash from Operations			17,134	17,797	18,830	19,798	20,594
Cash from Investing			(23,000)	(6,450)	(6,600)	(6,900)	(7,200)
Change in Long-Term Debt			(4,000)	(4,000)	(4,000)	(4,000)	(4,000)
Change in Common Equity			(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Dividends			(2,200)	(2,245)	(2,427)	(2,584)	(2,697)
Cash Available for Revolving Credit Line			(4,657)	4,102	4,803	9,562	15,259
REVOLVING CREDIT LINE							
Beginning Balance			–	4,657	555	–	–
Increase / (Decrease)			4,657	(4,102)	(555)	–	–
Ending Balance		–	4,657	555	–	–	–
Interest Rate	**Circularity**		5.0%	5.0%	5.0%	5.0%	5.0%
Interest Expense	Off		–	233	28	–	–
Interest Expense			1,080	1,073	628	360	120
Less: Interest Income			(84)	–	–	(42)	(96)
Net Interest Expense			996	1,073	628	318	24

Equity Schedule

All figures in USD thousands unless stated	2022A	2023F	2024F	2025F	2026F	2027F
Model Running: Best Case Drivers						
COMMON EQUITY						
Beginning Balance		38,670	37,670	36,670	35,670	34,670
Increase / (Decrease)		(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Ending Balance	38,670	37,670	36,670	35,670	34,670	33,670
Net Income		11,001	11,225	12,137	12,919	13,484
Payout Ratio		20.0%	20.0%	20.0%	20.0%	20.0%
Dividend		2,200	2,245	2,427	2,584	2,697
RETAINED EARNINGS						
Beginning Balance		20,433	29,234	38,214	47,923	58,259
Net Income		11,001	11,225	12,137	12,919	13,484
Dividends		(2,200)	(2,245)	(2,427)	(2,584)	(2,697)
Ending Balance	20,433	29,234	38,214	47,923	58,259	69,046