

CHAPTER 2

Financial Statements, Cash Flow, and Taxes

- Balance sheet
- Income statement
- Statement of cash flows
- Accounting income vs. cash flow
- MVA and EVA
- Personal taxes
- Corporate taxes

Balance Sheet: Assets

	<u>2001</u>	<u>2000</u>
Cash	7,282	57,600
AR	632,160	351,200
Inventories	<u>1,287,360</u>	<u>715,200</u>
Total CA	1,926,802	1,124,000
Gross FA	1,202,950	491,000
Less: Deprec.	<u>263,160</u>	<u>146,200</u>
Net FA	<u>939,790</u>	<u>344,800</u>
Total Assets	<u><u>2,866,592</u></u>	<u><u>1,468,800</u></u>

Liabilities and Equity

	<u>2001</u>	<u>2000</u>
Accts payable	524,160	145,600
Notes payable	636,808	200,000
Accruals	<u>489,600</u>	<u>136,000</u>
Total CL	1,650,568	481,600
Long-term debt	723,432	323,432
Common stock	460,000	460,000
Retained earnings	<u>32,592</u>	<u>203,768</u>
Total equity	<u>492,592</u>	<u>663,768</u>
Total L&E	<u><u>2,866,592</u></u>	<u><u>1,468,800</u></u>

Income Statement

	<u>2001</u>	<u>2000</u>
Sales	6,034,000	3,432,000
COGS	5,528,000	2,864,000
Other expenses	519,988	358,672
EBITDA	(13,988)	209,328
Depr. & Amort.	116,960	18,900
EBIT	(130,948)	190,428
Interest exp.	136,012	43,828
EBT	(266,960)	146,600
Taxes (40%)	(106,784)	58,640
Net income	(160,176)	87,960

Other Data

	<u>2001</u>	<u>2000</u>
No. of shares	100,000	100,000
EPS	(\$1.602)	\$0.88
DPS	\$0.110	\$0.22
Stock price	\$2.25	\$8.50
Lease pmts	\$40,000	\$40,000

Statement of Retained Earnings (2001)

Balance of retained earnings, 12/31/00	\$203,768
Add: Net income, 2001	(160,176)
Less: Dividends paid	<u>(11,000)</u>
Balance of retained earnings, 12/31/01	<u><u>\$32,592</u></u>

Statement of Cash Flows (2001)

OPERATING ACTIVITIES	
Net income	(160,176)
Add (Sources of cash):	
Depreciation	116,960
Increase in A/P	378,560
Increase in accruals	353,600
Subtract (Uses of cash):	
Increase in A/R	(280,960)
Increase in inventories	<u>(572,160)</u>
Net cash provided by ops.	(164,176)

L-T INVESTING ACTIVITIES

Investment in fixed assets	(711,950)
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FINANCING ACTIVITIES

Increase in notes payable	436,808
Increase in long-term debt	400,000
Payment of cash dividends	<u>(11,000)</u>
Net cash from financing	<u>825,808</u>

NET CHANGE IN CASH**(50,318)**

Plus: Cash at beginning of year	<u>57,600</u>
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Cash at end of year	<u><u>7,282</u></u>
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What can you conclude about D'Leon's financial condition from its statement of CFs?

- **Net cash from operations = -\$164,176, mainly because of negative NI.**
- **The firm borrowed \$825,808 to meet its cash requirements.**
- **Even after borrowing, the cash account fell by \$50,318.**

Did the expansion create additional net operating profit after taxes (NOPAT)?

$$\text{NOPAT} = \text{EBIT}(1 - \text{Tax rate}).$$

$$\begin{aligned}\text{NOPAT}_{01} &= -\$130,948(1 - 0.4) \\ &= -\$130,948(0.6) \\ &= \mathbf{-\$78,569.}\end{aligned}$$

$$\text{NOPAT}_{00} = \mathbf{\$114,257.}$$

What effect did the expansion have on net operating working capital (NOWC)?

$$\text{NOWC} = \text{Current assets} - \text{Non-interest bearing CL}$$

$$\begin{aligned}\text{NOWC}_{01} &= (\$7,282 + \$632,160 + \$1,287,360) \\ &\quad - (\$524,160 + \$489,600) \\ &= \mathbf{\$913,042.}\end{aligned}$$

$$\text{NOWC}_{00} = \mathbf{\$842,400.}$$

What effect did the expansion have on capital used in operations?

Operating capital = NOWC + Net fixed assets.

**Operating capital₀₁ = \$913,042 + \$939,790
= \$1,852,832.**

Operating capital₀₀ = \$1,187,200.

What is your initial assessment of the expansion's effect on operations?

	<u>2001</u>	<u>2000</u>
Sales	\$6,034,000	\$3,432,000
NOPAT	(\$78,569)	\$114,257
NOWC	\$913,042	\$842,400
Operating capital	\$1,852,832	\$1,187,200
Net Income	(\$160,176)	\$87,960

What effect did the company's expansion have on its net cash flow and operating cash flow?

$$\begin{aligned} \text{NCF}_{01} &= \text{NI} + \text{DEP} = (\$160,176) + \$116,960 \\ &= \mathbf{\$43,216}. \end{aligned}$$

$$\text{NCF}_{00} = \$87,960 + \$18,900 = \mathbf{\$106,860}.$$

$$\begin{aligned} \text{OCF}_{01} &= \text{NOPAT} + \text{DEP} \\ &= (\$78,569) + \$116,960 \\ &= \mathbf{\$38,391}. \end{aligned}$$

$$\begin{aligned} \text{OCF}_{00} &= \$114,257 + \$18,900 \\ &= \mathbf{\$133,157}. \end{aligned}$$

What was the free cash flow (FCF) for 2001?

FCF = OCF – Gross capital investment.

-OR-

FCF = NOPAT – Net capital investment

= -\$78,569 – (\$1,852,832 – \$1,187,200)

= -\$78,569 – \$665,632

= -\$744,201.

Is negative free cash flow always a bad sign?

Economic Value Added (EVA)

$$\begin{aligned} \text{EVA} &= \text{Operating Income After Tax} - \text{After-Tax Capital Costs} \\ &= \text{Funds Available to Investors} - \text{Cost of Capital Used} \\ &= \text{NOPAT} - \text{After-Tax Cost of Capital} \end{aligned}$$

EVA Concepts

- **In order to generate positive EVA, a firm has to more than just cover operating costs. It must also provide a return to those who have provided the firm with capital.**
- **EVA takes into account the total cost of capital, which includes the cost of equity.**

**What is the company's EVA?
Assume the firm's after-tax
percentage cost of capital was
10% in 2000 and 13% in 2001.**

$$\begin{aligned} \text{EVA}_{01} &= \text{NOPAT} - (\text{A-T cost of capital})(\text{Capital}) \\ &= -\$78,569 - (0.13)(\$1,852,832) \\ &= -\$78,569 - \$240,868 \\ &= \mathbf{-\$319,437.} \end{aligned}$$

$$\begin{aligned} \text{EVA}_{00} &= \$114,257 - (0.10)(\$1,187,200) \\ &= \$114,257 - \$118,720 \\ &= \mathbf{-\$4,463.} \end{aligned}$$

Would you conclude that the expansion increased or decreased MVA?

$$\text{MVA} = \text{Market value of equity} - \text{Equity capital supplied}$$

During the last year stock price has decreased 73%, so market value of equity has declined. Consequently, MVA has declined.

Leading Creators of Wealth in the U.S. Market Value Added in 2000

<u>Company</u>	<u>Market Value Added</u>
General Electric	\$502,307 million
Microsoft	\$388,922 million
Cisco Systems	\$377,883 million
Intel	\$281,832 million
Pfizer	\$260,984 million
Merck	\$193,348 million
EMC	\$191,904 million
Oracle	\$180,885 million
American Int'l Group	\$177,982 million
Wal-Mart Stores	\$177,450 million

Does D'Leon pay its suppliers on time?

- **Probably not.**
- **A/P increased 260% over the past year, while sales increased by only 76%.**
- **If this continues, suppliers may cut off D'Leon's trade credit.**

Does it appear that D'Leon's sales price exceeds its cost per unit sold?

- **No**, the negative NOPAT and decline in cash position shows that D'Leon is spending more on its operations than it is taking in.

What effect would each of these actions have on D'Leon's cash account?

1. The company offers 60-day credit terms. The improved terms are matched by its competitors, so sales remain constant.
 - A/R would ↑
 - Cash would ↓

2. **Sales double as a result of the change in credit terms.**
 - **Short run: Inventory and fixed assets ↑ to meet increased sales. A/R ↑ , Cash ↓. Company may have to seek additional financing.**
 - **Long-run: Collections increase and the company's cash position would improve.**

How did D'Leon finance its expansion?

- D'Leon financed its expansion with **external capital**.
- D'Leon issued **long-term debt** which reduced its financial strength and flexibility.

Would D'Leon have required external capital if they had broken even in 2001 (Net Income = 0)?

- **YES**, the company would still have to finance its increase in assets. Looking to the Statement of Cash Flows, we see that the firm made an investment of \$711,950 in net fixed assets. Therefore, they would have needed to raise additional funds.

What happens if D'Leon depreciates its fixed assets over 7 years (as opposed to the current 10 years)?

- **No effect on physical assets.**
- **Fixed assets on balance sheet would decline.**
- **Net income would decline.**
- **Tax payments would decline.**
- **Cash position would improve.**

**D'Leon received a tax credit of
\$106,784 in 2001.**

- **This suggests the company paid at least \$106,784 in taxes during the past 2 years.**
- **If D'Leon's payments over the past 2 years were less than \$106,784 the firm would have had to carry forward the amount of its loss that was not carried back.**
- **If the firm did not receive a full refund its cash position would be even worse.**