**a. What effect did the expansion have on sales and net income? What effect did the expansion have on the asset side of the balance sheet? What effect did it have on liabilities and equity?**

**Answer: Sales increased by over $2.4 million, but costs shot up by more than sales. So that made the net income negative, but the firm did receive a tax refund since it paid taxes of more than $63,424 during the past two years. The net fixed assets almost tripled in size, Accounts Receivable and inventory almost doubled and cash and short-term investments fell. Current Liabilities increased as creditors and suppliers financed part of the expansion. Long-term debt increased to help finance the expansion. The company did not issue any stock. Retained earnings fell, due to the year’s negative net income and dividend payment.**

**b. What do you conclude from the statement of cash flows?**

**Answer: Net cash flows from operations were -$503,936 because of negative net income and increases in working capital. The firm spent $711,950 on fixed assets. The firm borrowed a lot and sold some short-term investments to meet its cash requirements. Even after the company borrowed, the cash account fell by $1,718.**

**c. What is free cash flow? Why is it important? What are the five uses of FCF?**

**Answer: Free Cash Flow is the amount of cash available from operations for distributions to all investors (including stockholders and debt holders) after making the necessary investments to support operations. Free cash flows are important because a company’s value depends upon the amount of free cash flows it can generate. The five uses of free cash flows are to pay interest on debt, pay back principal on debt, pay dividends, buy back stock and buy non-operating assets.**

**d. What are operating current assets? What are operating current liabilities? How much net operating working capital and total net operating capital does Computron have?**

**Answer:** NOWC = operating CA – operating CL

NOWC05 = (7,282 + 632,160 + 1,287,360)-(324,000 + 284,960)

=$1,317,842

NOWC04 = (9,000 + 351,200 + 715,200)-(145,600 + 136,000)

=$793,800

Total operating working capital = NOWC + net fixed assets.

Operating capital in 2005 = 1,317,842 + 939,790

= $2,257,632

Operating capital in 2004 = 793,800 + 344,800

= $1,138,600

**e. What are Computron’s net operating profit after taxes (NOPAT) and free cash flow (FCF)?**

**Answer:** NOPAT = EBIT(1 - Tax rate)

NOPAT05 = 17,440(1-.4) = $10,464

NOPAT04 = 209,100(1-.4) = $125,460

FCF = NOPAT - Net investment in capital

=10464 - (2257632-1138600)

=10464 – 1119032

= - $1108568

**f. Calculate Computron’s return on invested capital. Computron has a 10% cost of capital (WACC). Do you think Computron’s growth added value?**

**Answer:** ROIC = NOPAT / Total NET operating capital**.**

ROIC05 = 10464/2257632= .5%

nO, cOMPUTRON’S GROWTH DID NOT ADD VALUE BECAUSE THE ROIC IS LESS THAN THE WACC.

ROIC04 = 125460/1138600= 11%

yES, COMPUTRON’S GROWTH ADDED VALUE BECAUSE THE ROIC IS GREATER THAN THE WACC.

g. Jamison also has asked you to estimate Computron's EVA. She estimates that the after-tax cost of capital was 10 percent in both years.

**Answer:** EVA = NOPAT- (WACC)(Capital).

EVA05 = 10464-(.10)(2257632)= -$215229

EVA04 = 125460-(.10)(1138600)= $11600