conversion cycle as much as possible. In some circumstances, a firm has a comparative advantage in working capital management because of the nature of its business. This cyberproblem looks at two competing booksellers. Barnes and Noble Inc. is a hybrid between the traditional brick and mortar retailer and the Internet retailer. However, approximately 85 percent of its revenues are generated in the traditional retail setting, which will lead us to consider it a traditional retail firm. Amazon.com, on the other hand, represents the new wave of Internet retailing. The success of Amazon.com has spawned the flood of specialty retailing into the Internet marketplace. We will look at the cash conversion cycles of these companies and their implications. Go to the cyberproblem on the textbook's web site, http://www.harcourtcollege.com/finance/theory10e/resources/cyberprob/22cyber-a.html, and answer the questions shown there.

Mini Case



See Ch 22 Show.ppt and Ch 22 Mini Case.xls.

Dan Barnes, financial manager of Ski Equipment Inc. (SKI), is excited, but apprehensive. The company's founder recently sold his 51 percent controlling block of stock to Kent Koren, who is a big fan of EVA (Economic Value Added). EVA is found by taking the after-tax operating profit and then subtracting the dollar cost of all the capital the firm uses:

EVA = NOPAT - Capital costs
= EBIT(
$$I - T$$
) - WACC (Operating capital).

If EVA is positive, then the firm is creating value. On the other hand, if EVA is negative, the firm is not covering its cost of capital, and stockholders' value is being eroded. Koren rewards managers handsomely if they create value, but those whose operations produce negative EVAs are soon looking for work. Koren frequently points out that if a company can generate its current level of sales with less assets, it would need less capital. That would, other things held constant, lower capital costs and increase its EVA.

Shortly after he took control of SKI, Kent Koren met with SKI's senior executives to tell them of his plans for the company. First, he presented some EVA data that convinced everyone that SKI had not been creating value in recent years. He then stated, in no uncertain terms, that this situation must change. He noted that SKI's designs of skis, boots, and clothing are acclaimed throughout the industry, but something is seriously amiss elsewhere in the company Costs are too high, prices are too low, or the company employs too much capital, and he wants SKI's managers to correct the problem or else.

Barnes has long felt that SKI's working capital situation should be studied—the company may have the optimal amounts of cash, securities, receivables, and inventories, but it may also have too much or too little of these items. In the past, the production manager resisted Dan's efforts to question his holdings of raw materials inventories, the marketing manager resisted questions about finished goods, the sales staff resisted questions about credit policy (which affects accounts receivable), and the treasurer did not want to talk about her cash and securities balances. Koren's speech made it clear that such resistance would no longer be tolerated.

Dan also knows that decisions about working capital cannot be made in a vacuum. For example, if inventories could be lowered without adversely affecting operations, then less capital would be required, the dollar cost of capital would decline, and EVA would increase. However, lower raw materials inventories might lead to production slowdowns and higher costs, while lower finished goods inventories might lead to the loss of profitable sales. So, before inventories are changed, it will be necessary to study operating as well as financial effects. The situation is the same with regard to cash and receivables. Following are some ratios for SKI:

880

- m. Dan knows that SKI sells on the same credit terms as other firms in its industry. Use the ratios presented in the first table to explain whether SKI's customers pay more or less promptly than those of its competitors. If there are differences, does that suggest that SKI should tighten or loosen its credit policy? What four variables make up a firm's credit policy, and in what direction should each be changed by SKI?
- n. Does SKI face any risks if it tightens its credit policy?
- o. If the company reduces its DSO without seriously affecting sales, what effect would this have on its cash position (1) in the short run and (2) in the long run? Answer in terms of the cash budget and the balance sheet. What effect should this have on EVA to the long run?

| | Nov | Dec | Jan | Feb | Mar | Apr |
|---|---------------|-------------|--|-------------|----------|----------|
| I. COLLECTIONS AND PURCHASES WORKSHEET | | • | | | | |
| (1) Sales (gross) | \$71,218 | \$68,212 | \$65,213 | \$52,475 | \$42,909 | \$30,524 |
| Collections | | | | | | |
| (2) During month of sale (0.2) (0.98) (month's sales) | | | 12,781.75 | 10,285.10 | | |
| (3) During first month after sale (0.7) (previous month's sales) | | | 47,748.40 | 45,649.10 | | |
| (4) During second month after sale (0.1) (sales 2 months ago) | | | 7,121.80 | 6,821.20 | | |
| (5) Total collections (Lines $2 + 3 + 4$) | | | \$67,651.95 | \$62,755.40 | | |
| Purchases | | | | | | |
| (6) (0.85) (forecasted sales 2 months from | now) | \$44,603.75 | \$36,472.65 | \$25,945.40 | | |
| (7) Payments (1-month lag) | | | 44,603.75 | 36,472.65 | | |
| II. CASH GAIN OR LOSS FOR MONTH | | | | | | |
| (8) Collections (from Section I) | | | \$67,651.95 | \$62,755.40 | | |
| (9) Payments for purchases (from Section I |) | | 44,603.75 | 36,472.65 | | |
| (10) Wages and salaries | | | 6,690.56 | 5,470.90 | | |
| (11) Rent | | | 2,500.00 | 2,500.00 | | |
| (12) Taxes | | | 400 701 04 | # | | |
| (13) Total payments | | | \$53,794.31 | \$44,443.55 | | |
| (14) Net cash gain (loss) during month (Line 8 – Line 13) | | | \$13,857.64 | \$18,311.85 | | |
| III. CASH SURPLUS OR LOAN REQUIREMENT | | | | | | |
| (15) Cash at beginning of month if no borro | owina is done | | \$ 3.000.00 | \$16,857.64 | | |
| (16) Cumulative cash (cash at start + gain or - loss = | | | ************************************** | | | |
| Line 14 + Line 15) | | | 16,857.64 | 35,169.49 | | |
| (17) Target cash balance | | | 1,500.00 | 1,500.00 | | |
| (18) Cumulative surplus cash or loans outst maintain \$1,500 target cash balance | anding to | | | | | |
| (Line 16 – Line 17) | | | \$15,357.64 | \$33,669.49 | | |

| | SKI | Industry |
|---------------------------------|--------|----------|
| Current | 1.75 | 2.25 |
| Quick | 0.83 | 1.20 |
| Debt/assets | 58.76% | 50.00% |
| Turnover of cash and securities | 16.67 | 22.22 |
| Days sales outstanding | 45.00 | 32.00 |
| Inventory turnover | 4.82 | 7.00 |
| Fixed assets turnover | 11.35 | 12.00 |
| Total assets turnover | 2.08 | 3.00 |
| Profit margin on sales | 2.07% | 3.50% |
| Return on equity (ROE) | 10.45% | 21.00% |
| Payables deferral period | 30.00 | 33.00 |

- a. Dan plans to use the preceding ratios as the starting point for discussions with SKI's operating executives. He wants everyone to think about the pros and cons of changing each type of current asset and how changes would interact to affect profits and EVA. Based on the data in the table, does SKI seem to be following a relaxed, moderate, or restricted working capital policy?
- b. How can one distinguish between a relaxed but rational working capital policy and a situation where a firm simply has a lot of current assets because it is inefficient? Does SKI's working capital policy seem appropriate?
- c. Calculate SKI's cash conversion cycle, assuming all calculations use a 360-day year.
- d. What might SKI do to reduce its cash and securities without harming operations?
- e. What is "float," and how is it affected by the firm's cash manager (treasurer)?

In an attempt to better understand SKI's cash position, Dan developed a cash budget. Data for the first 2 months of the year are shown at the end of this Mini Case. (Note that Dan's preliminary cash budget does not account for interest income or interest expense.) He has the figures for the other months, but they are not shown in this Mini Case.

- f. Should depreciation expense be explicitly included in the cash budget? Why or why not?
- 3. In his preliminary cash budget, Dan has assumed that all sales are collected and, thus, that SKI has no bad debts. Is this realistic? If not, how would bad debts be dealt with in a cash budgeting sense? (Hint: Bad debts will affect collections but not purchases.)
- h. Dan's cash budget for the entire year, although not given here, is based heavily on his fore-cast for monthly sales. Sales are expected to be extremely low between May and September but then increase dramatically in the fall and winter. November is typically the firm's best month, when SKI ships equipment to retailers for the holiday season. Interestingly, Dan's forecasted cash budget indicates that the company's cash holdings will exceed the targeted cash balance every month except for October and November, when shipments will be high but collections will not be coming in until later. Based on the ratios in the first table, does it appear that SKI's target cash balance is appropriate? In addition to possibly lowering the target cash balance, what actions might SKI take to better improve its cash management policies, and how might that affect its EVA?
- i. What reasons might SKI have for maintaining a relatively high amount of cash?
- j. What are the three categories of inventory costs? If the company takes steps to reduce its inventory, what effect would this have on the various costs of holding inventory?
- k. Is there any reason to think that SKI may be holding too much inventory? If so, how would that affect EVA and ROE?
- 1. If the company reduces its inventory without adversely affecting sales, what effect should this have on the company's cash position (1) in the short run and (2) in the long run? Explain in terms of the cash budget and the balance sheet.