

1. (a) Shares outstanding needed = $\frac{(\$1,200,000 \times .40)}{\$2.00} = \frac{\$480,000}{\$2.00} = 240,000$

(b) $300,000 - 240,000 = 60,000$ shares to repurchase

2. **Establishing General Access Company's Dividend Policy and Initial Dividend**

This case requires the student to evaluate the alternative dividend payout policies that a firm may follow. They need to evaluate the alternatives with regard to both the financial facts of the firm as well as the stockholders dividend preferences.

a) The low-regular-and-extra dividend policy should be adopted for two reasons. First, this approach provides the dividend stability consistent with the firm's earnings stability and growth. Secondly, the firm has the flexibility to increase or decrease dividends when earnings vacillate due to economic or competitive conditions.

b) There are six factors the board should consider before setting an initial dividend policy:

1. Legal constraints – are there legal restrictions that come into play that will prohibit the firm from paying a dividend. A common constraint in most states is the firm cannot pay dividends out of "legal capital," which normally measured as the par value of common stock, plus perhaps any paid-in capital in excess of par.

2. Contractual constraints – loan covenants may be in place that place some prohibitions on the ability of the firm to pay dividends.

3. Internal constraints – this factor addresses whether or not the firm has the available funds to make the cash dividend payments. Although legally a firm can borrow to pay dividends most lenders are reluctant to make such loans.

4. Growth prospects – if the firm needs the funds to invest in new or ongoing projects they may wish to retain earnings to fund the investments. The firm can pay dividends and then raise funds externally but often these external sources are more expensive and/or increase the risk of the firm.

5. Owner considerations – although it is impossible to maximize the wealth of every single owner, managers should consider the tax status, owners other wealth opportunities, and ownership dilution possibilities when making the dividend decision.

6. Market consideration – how will market participants view the dividend decision? This factors is concerned with the information content of the decision to institute a dividend payout where none previously existed.

- c) The initial dividend should be approximately \$0.72 per share per year (\$0.18 per quarter). General Access has had EPS in excess of \$0.72 since 1995, the year after they went public. This amount is a payout ratio of about 20% based on 2000 EPS. This is a substantial initial dividend, which is probably what is needed by the market since investors in General Access have experienced rapid share price appreciation. To start with too low of a dividend would signal a decline in the investment potential of the firm. To make the dividend higher may place financial stress on the firm in the near future should profits decline. Even if the firm's EPS declined 10% to \$3.33 the payout ratio would increase to only 21.6%. If better than expected earnings are experienced the firm can declare the extra dividend to share this wealth with stockholders.

3. CASA DE DISEÑO

Casa de Diseño, involves evaluating working capital management of a furniture manufacturer. Operating cycle, cash conversion cycle, and negotiated financing needed are determined and compared with industry practices. The student then analyzes the impact of changing the firm's credit terms to evaluate its management of accounts receivable before making a recommendation.

$$\begin{aligned} \text{a) Operating Cycle} &= \text{Average Age of Inventory} + \text{Average Collection Period} \\ &= 110 \text{ days} + 75 \text{ days} \\ &= 185 \text{ days} \end{aligned}$$

$$\begin{aligned} \text{Cash Conversion Cycle} &= \text{Operating Cycle} - \text{Average Payment Period} \\ &= 185 \text{ days} - 30 \text{ days} \\ &= 155 \text{ days} \end{aligned}$$

$$\begin{aligned} \text{Negotiated Financing} &= \frac{\text{Total annual outlays}}{360 \text{ days}} \times \text{Cash Conversion Cycle} \\ &= \frac{\$26,500,000}{360} \times 155 \\ &= \$11,409,722 \end{aligned}$$

$$\begin{aligned} \text{b) Industry OC} &= 83 \text{ days} + 75 \text{ days} \\ &= 158 \text{ days} \end{aligned}$$

$$\begin{aligned} \text{Industry CCC} &= 158 \text{ days} - 39 \text{ days} \\ &= 119 \text{ days} \end{aligned}$$

$$\text{Industry Financing Needed} = \frac{\$26,500,000}{360} \times 119$$

Quiz II Solution

$$= \$8,759,722$$

c) Casa de Diseño

Negotiated Financing	\$11,409,722
Less: Industry Financing	<u>8,759,722</u>
	\$ 2,650,000

Cost of inefficiency: $\$2,650,000 \times .15 = \$397,500$

d) (1) Offering 3/10 net 60:

$$\begin{aligned} \text{Reduction in collection period} &= 75 \text{ days} \times (1 - .4) \\ &= 45 \text{ days} \end{aligned}$$

$$\begin{aligned} \text{Operating cycle} &= 83 \text{ days} + 45 \text{ days} \\ &= 128 \text{ days} \end{aligned}$$

$$\begin{aligned} \text{Cash Conversion Cycle} &= 128 \text{ days} - 39 \text{ days} \\ &= 89 \text{ days} \end{aligned}$$

$$\begin{aligned} \text{Negotiated Financing} &= \frac{\$26,500,000}{360} \times 89 \text{ days} \\ &= \$6,551,389 \end{aligned}$$

$$\begin{aligned} \text{Additional Savings} &= \$8,759,722 - \$6,551,389 = \$2,208,333 \\ &= \$2,208,333 \times .15 = \$331,250 \end{aligned}$$

(2) Reduction in sales: $\$40,000,000 \times .45 \times .03 = \$540,000$

(3) Average investment in accounts receivable assuming cash discount:

$$\begin{aligned} \text{New average collection period} &= 45 \text{ days} \\ (\$40,000,000 \times .80) \div (360 \div 45) &= \$4,000,000 \end{aligned}$$

Average investment in accounts receivable assuming no cash discount:

$$(\$40,000,000 \times .80) \div (360 \div 75) = \$6,666,667$$

Reduction in investment in accounts receivable:

$$\$6,666,667 - \$4,000,000 = \$2,666,667$$

Annual savings:

$$\$2,666,667 \times .15 = \$400,000$$

(4) Reduction in bad debt expense:

$$\$40,000,000 \times (.02 - .015) = \$200,000$$

- e) Ms. Leal should bring working capital measures in line with the industry and offer the proposed cash discount.

4. Evaluating Global Textiles' Proposed Change in Credit Terms

This case examines the impact on accounts receivable and inventory of implementing a longer credit period. To determine whether the proposed change is financially sound, the student must calculate all related costs and savings.

- a) Additional profit contribution from sales:

$$[(\$4,800,000 - \$4,000,000) \times (1 - .8 \text{ variable costs})] = \$160,000$$

- b) Cost of increased investment in A/R:

Average investment, proposed plan:

$$\frac{\$4,800,000 \times .8}{\frac{360}{90}} = \$960,000$$

Average investment, present plan:

$$\frac{\$4,000,000 \times .8}{\frac{360}{45}} = 400,000$$

Marginal investment in A/R \$560,000

Required return on investment x .16

Cost of marginal investment in A/R (89,600)

- c) Reduction in inventory investment:

Marginal investment in A/R attributable to existing customers = Inventory reduction:

$$\begin{aligned} .20 \times \$560,000 &= \$112,000 \\ \times \text{cost of carrying inventory} &\quad \underline{\times .26} \end{aligned}$$

Savings from inventory reduction

29,120

- d) Cost of increase in marginal bad debts:

Bad debts, proposed plan (.025 x \$4,800,000) \$120,000

Bad debts, present plan (.01 x \$4,000,000) 40,000

Cost of marginal bad debts (80,000)

- e) Net benefit from implementing proposed plan \$19,520

Because the savings from the proposed increase in the credit period exceed the costs, Mr. Steinbacher should recommend implementation.

5. a. City-Wide Bank is the best alternative, since it has the lowest cost.

$$\text{City-Wide Bank: } [\$75,000 \times (.12 \div 12)] + (.0025 \times \$100,000) = \$1,000$$

Quiz II Solution

$$\begin{aligned} \text{Sun State Bank: } & \$100,000 \times (.13 \div 12) & = & \$1,083 \\ \text{Citizen's Bank and Trust: } & [\$60,000 \times (.15 \div 12)] + (.005 \times \$60,000) & = & \$1,050 \end{aligned}$$

$$\begin{aligned} \text{b. Cost of giving up cash discount} & = & (.02 \div .98)(360 / 20) & = & 36.73\% \\ \text{The effective cost of taking a loan} & = & (\$1,000 / \$75,000) \times 12 & = & 16.00\% \end{aligned}$$

Since the cost of giving up the discount (36.73%) is higher than borrowing at Citywide Bank (16%), the firm should borrow to take the discount.

KAKKANAN.NET