Week 5 Text Problems

Name:

Ch. 17: Problem B1

B1. (Choosing financial targets) Bixton Company's new chief financial officer is evaluating Bixton's capital structure. She is concerned that the firm might be underleveraged, even though the firm has larger-than-average research and development and foreign tax credits when compared to other firms in its industry. Her staff prepared the industry comparison shown here.

a. Bixton's objective is to achieve a credit standing that falls, in the words of the chief financial officer, "comfortably within the 'A' range." What target range would you recommend for each of the three credit measures?
b. Before settling on these target ranges, what other factors should Bixton's chief financial officer consider?
c. Before deciding whether the target ranges are really appropriate for Bixton in its current financial situation, what key issues specific to Bixton must the chief financial officer resolve?

Rating Category	Fixed Charge Coverage	Funds From Operations/Total Debt	Long-Term Debt/Capitalization
Aa	4.00–5.25*x*	60–80%	17–23%
A	3.00–4.30	45–65	22–32
Baa	1.95–3.40	35–55	30–41

a. FCC = 3.40 - 4.30

FFO / TD = 55 – 65

L D / C = 25 - 30

b. Bixton's CFO has to realize that a lender, at their discretion, may choose varying interest rates regardless of whether or not they share the same debt percentage as their competitors. Bixton's CFO should also consider being able to utilize debt management and completely interest free tax credit considerations such as issuance costs before settling on these targets.

c. Foreign tax credits should be considered by the CFO. When tax credits that are foreign are considered, having extra shield from debt is invaluable.

Ch. 18: Problems A10 & B2

A10. (Dividend adjustment model) Regional Software has made a bundle selling spreadsheet software and has begun paying cash dividends. The firm's chief financial officer would like the firm to distribute 25% of its annual earnings (POR = 0.25) and adjust the dividend rate to changes in earnings per share at the rate ADJ = 0.75. Regional paid $1.00 per share in dividends last year. It will earn at least $8.00 per share this year and each year in the foreseeable future. Use the dividend adjustment model, Equation (18.1), to calculate projected dividends per share for this year and the next four.

$D_1 = ADJ\ (POR(EPS_1) - D_0) + D_0$

$D_1 = .75\ (.25 * \$8.00 - \$1.00) + \$1.00 = \$1.75$

$D_2 = .75\ (.25 * \$8.00 - \$1.75) + \$1.75 = \$1.94$

$D_3 = .75\ (.25 * \$8.00 - \$1.94) + \$1.94 = \$1.985$

$D_4 = .75\ (.25 * \$8.00 - \$1.98) + \$1.98 = \$2.00$

$D_5 = .75\ (.25 * \$8.00 - \$2.00] + \$2.00 = \$2.00$

B2. (Dividend policy) A firm has 20 million common shares outstanding. It currently pays out $1.50 per share per year in cash dividends on its common stock. Historically, its payout ratio has ranged from 30% to 35%. Over the next five years it expects the earnings and discretionary cash flow shown below in millions.

a. Over the five-year period, what is the maximum overall payout ratio the firm could achieve without triggering a securities issue?
b. Recommend a reasonable dividend policy for paying out discretionary cash flow in years 1 through 5.

Â	1	2	3	4	5	Thereafter
Earnings	100	125	150	120	140	150+ per year
Discretionary cash flow	50	70	60	20	15	50+ per year

a. Discretionary cash flow total = $215

Earnings total for years 1-5 = $635

MOPR = $215 / $635 = 33.86 %

b. The current dividend = 20 million shares * $1.50 = $30 million

Over time a firm could increase its dividends from $30 to $50 million.

D1 = $35 divided by 20 = $1.75

D2 = $39 divided by 20 = $1.95

D3 = $43 divided by 20 = $2.15

D4 = $48 divided by 20 = $2.40

D5 = $50 divided by 20 = $2.50

Ch. 20: Problem A2