

## Relative Valuation and Sum of the Parts Valuation

**Objective:** The objective of this assignment is to learn how to value an actual company employing an approach known as relative valuation which involves using the total enterprise value (TEV) and also equity market value (EMV) multiples of comparable firms to value a subject firm. You will also learn how to value a firm using the sum of the parts valuation method which is a variation of the relative valuation technique. This assignment should be done after you have finished reading Chapter 14 through Chapter 16 in Damodaran, *Investment Valuation*.

**First Company (Relative Valuation):** Coldwater Creek (CWTR) <http://www.coldwatercreek.com/>) is a multi-channel, specialty retailer of women's apparel, accessories, jewelry and gift items. The firm offers its customers colorful, proprietary designs and novelty items, including casual weekend wear, soft career and special occasion. Coldwater Creek's products are current although not trendy and are designed for ease and simplicity. All of company's apparel is designed, developed and sold under the Coldwater Creek label. The company's merchandise assortment is designed to appeal to women between the ages of 30 and 60, with household incomes in excess of \$75,000.



Upscale Retail Competitors: AnnTaylor Stores (ANN), Cache (CACH), Chico's FAS (CHS), Christopher & Banks (CBK), J. Jill Group (JILL) and Talbots (TLB).

**Second Company (Sum of the Parts Valuation):** Anheuser-Busch Companies. (BUD) wants to be the life of the party. The company is the world's largest brewer, one of the largest theme park operators and manufacturers of aluminum cans in the US, and the largest recycler of aluminum cans in the world. The company makes more than 30 different beers, including Bud Light, Michelob, and Busch. It operates theme parks Busch Gardens and SeaWorld, and water parks Water Country USA and Adventure Island. Chairman August Busch III is the fourth generation of the Busch family to run Anheuser-Busch.



Competing Brewers: Molson Coors Brewing (TAP), Heineken N.V. (HINKY), Diageo plc (DEO), Boston Beer (SAM)

Competing Amusement Park Operators: Six Flags (PKS), Cedar Fair, L.P. (FUN)

Competing Packaging and Container Manufacturers: Aptar Group (ATR), Ball Corporation (BLL), Crown Holdings (CCK), Rexam PLC (REXMY)

**Assignment:** Download the file labeled ColdwaterCreek-AnaheuserBusch from my website and do all your work on this spreadsheet. This is an *individual* assignment. Although you can discuss this case with your classmates, you are responsible for doing the case yourself. Students caught cheating will be able to experience depression first-hand since they'll be given an F on this assignment. The assignment/questions can be found after the assumptions.

**Warning:** The financial statements are quarterly. **Some financial statements are stated in thousands while other firms financial statements are stated in millions** since not all data sources used contained the necessary financial statements for each firm. Make the necessary adjustments to these quarterly numbers to obtain the trailing twelve-month (TTM) figures. Income statement numbers are “flow” numbers while balance sheet items are “stock” numbers<sup>1</sup>.

**Assignment:**

1. Relative Valuation of Coldwater Creek (50 points total):

- a. Value of Operating Leases (10 points): Calculate the present value of operating leases for Coldwater Creek by completing the **1a. PV OpLease (CWTR)** worksheet. Fill in each cell that is highlighted in **yellow**. To calculate the before-tax cost of debt for Coldwater Creek which you will use as your discount rate in discounting the off-balance sheet debt flows (operating lease payments), you will need to link your worksheet to the **TreasRates (20050604)** and **Bond Spreads (20050604)** worksheets. Recall from Financial Management that the before tax cost of debt is equal to the risk free rate added to the appropriate bond spread.

$$\text{Cost of Debt (kDebt)} = \text{risk free yield} + \text{bond spread}$$

We will assume that for Coldwater Creek, its debt which is rated **AAA** typically matures at the end of **10 years**. As such, your risk free rate is the yield associated with the 10 year Treasury bond. Note that Coldwater Creek has no on-balance sheet debt but does have off-balance sheet debt in the form of operating leases. Spreads in the worksheet are stated as spreads above the applicable treasury yield and are stated in basis points (100 basis points = 1%).

Please refer to Appendix A located on the second to last page of this case study if you do not know how to link worksheets together.

- b. Relative Valuation of CWTR (30 points): Using the template provided in the **1b. RelVal (CWTR)** worksheet, complete the template by filling in each cell that is highlighted in **yellow** by linking the worksheets containing the 10Qs for the competitors of as well as the 10Q of Coldwater Creek (CWTR). Note that the debt of CWTR includes both debt stated on the balance sheet and also off-

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<sup>1</sup>The term “stock” here is akin to closing your store and taking “stock” of the inventory that you currently have at present. In contrast to this, a flow is like cash flow or your monthly salary.

balance sheet debt such as the present value of operating leases. What is the justified average **equity** value for Coldwater Creek – mean price per share and median price per share - based on the various multiples (please highlight in yellow on the spreadsheet)?

- c. Choosing the correct multiple(s) (5 points): What multiple(s) appear to be the most reliable in terms of enterprise value multiples for your answer in question 1 above if you use the lowest standard deviation as the criteria? Which are the most reliable equity multiples? Why? On the basis of economic intuition (rather than using the lowest standard deviation as the selection criteria), which multiples should you focus on? Please explain.
- d. Analyst recommendations (5 points): Do you agree or disagree with the analyst recommendations for Coldwater Creek located in the **Analysts Recmd (CWTR)** worksheet given your preceding answers? Why or why not? Please discuss.

## 2. Sum of the Parts Valuation of Anheuser-Busch Companies (50 points total):

- a. Firm Value of Beer Segment (10 points): Calculate the Firm Value that is associated with Anheuser-Busch's Beer Segment using the **2a. Beer Segment** worksheet. The revenue, EBITDA, and EBIT associated with the various business segments of the Anheuser-Busch Companies can be found in the **BUD (Segments)** worksheet. The beer segment consists of both domestic and international beer.

**Important Note:** Two of your comparable companies, Heineken N.V. (HINKY) and Diageo plc (DEO) are American Depositary Receipt (ADR). An ADR is a negotiable certificate issued by a U.S. bank representing a specific number of shares of a foreign stock traded on a U.S. stock exchange. ADRs make it easier for Americans to invest in foreign companies, due to the widespread availability of dollar-denominated price information, lower transaction costs, and timely dividend distributions. The implication of this is that you will need to adjust the number of shares outstanding to the extent that a one to one relationship doesn't exist e.g., 1 share per ADR. Observe that for Heineken, there is 1 share per ADR so the number of shares outstanding does NOT need to be adjusted. However, for Diageo plc (DEO), there are 4 shares per ADR. As such, you need to divide the reported number of shares outstanding 2971.71 million by 4 (shares) to obtain the ACTUAL number of shares outstanding for DEO ( $742.9 \text{ million} = 2971.71/4$ )



- b. Firm Value of Packaging Segment (10 points): Calculate the Firm Value that is associated with Anheuser-Busch's Packaging Segment using the **2b. Packaging Segment** worksheet. Note: Rexam PLC is an ADR.

c. Firm Value of Amusement Park Segment (10 points): Calculate the Firm Value that is associated with Anheuser-Busch's Amusement Park Segment using the **2c. Amusement Pk Segment** worksheet.



d. Value of Operating Leases (10 points): Calculate the present value of operating leases for Coldwater Creek by completing the **2d. PV OpLease (BUD)** worksheet. Fill in each cell that is highlighted in **yellow**.

e. Firm Value vis-à-vis Sum of the Parts (10 points): Calculate the Firm Value of Anheuser-Busch using the **2e. Total Value by Segments** worksheet. Which valuation multiple(s) do you feel are the most reliable for BUD? Also, discuss whether you should use the mean value or the median value? Please provide any economic and statistical intuition for your choices. Based on the sum of the parts valuation is BUD's stock undervalued, overvalued, or correctly priced?

Please turn in a hard copy of the spreadsheet. This is an **individual** assignment. Any person caught cheating will receive an F on this project.





PMT		=TreasRates (20050604)!E11							
	A	B	C	D	E	F	G	H	
1	<b>Treasury Rates</b> (June 4, 2005)								
2									
3				<b>Current</b>	<b>Current</b>				
4	<b>Bills</b>	<b>Coupon(%)</b>	<b>Mat Date</b>	<b>Price</b>	<b>Yield(%)</b>				
5	3 month		9/1/2005	2.93	2.99				
6	6 month		12/1/2005	3.02	3.11				
7									
8	<b>Notes/Bonds</b>								
9	2 year	3.5	5/31/2007	99-28	3.57				
10	5 year	3.875	5/15/2010	100-20	3.73				
11	10 year	4.125	5/15/2015	101-07	3.98				
12	30 year	5.375	2/15/2031	116-31	4.28				
13									
14	Source: <a href="http://www.bloomberg.com">http://www.bloomberg.com</a>								
15									
16									
17									
18									
19									

Observe that the worksheet name and exclamation mark with the cell coordinates are now in the box at the top of the spreadsheet (**'TreasRates (20050604)!E11**). The exclamation mark is used in a multi-sheet workbook to point to cell references. Next, divide by 100 e.g., **'TreasRates (20050604)!E11/100** and hit the **Enter** key. This will take you back to the **1a. PV OpLease (CWTR)** worksheet.

C15		=TreasRates (20050604)!E11/100							
	A	B	C	D	E	F	G	H	
1	Operating Leases								
2									
3		Year	Thousands		Year	Amount	PVF	PV CF	
4		2005	29,303		2005	29,303			
5		2006	31,214		2006	31,214			
6		2007	31,348		2007	31,348			
7		2008	30,442		2008	30,442			
8		2009	29,412		2009	29,412			
9		Thereafter	117,331		2010	29,333			
10		Years Left	4		2011	29,333			
11		\$/Year	29,333		2012	29,333			
12					2013	29,333			
13		Bond Rating (CWTR)	AAA						
14						PV Operating Leases			
15		10Yr Treas Yield	0.0398						
16		+ Bond Spread							
17		B4tax Cost of Debt							