

15.535 – Winter 2003
Quiz #1 – March 6, 2003

QUESTION 1: Multiples Comparisons (20 pts)

Dell Computer trades at a M/B ratio of 13.86. The industry M/B ratio is 10.5.

(a) Provide 2 reasons why you might expect Dell to have lower stock returns than firms in its industry over the next 5 years (Hint: Market Efficiency compared to Market Inefficiency)

(b) Even though Dell's M/B ratio is high relative to its industry, this ratio may tell us nothing about whether Dell's stock is either under- or over-priced. Explain. (Hint: Accounting reasons).

QUESTION 2: Accounting Quality and Ratio Analysis (20 pts)

Q-Aqua Resources is water pipeline and distribution company. It claims that the water supply market is "... *most important and, potentially, the fastest growing global resource market over the next 50 years.*"

The company reported losses (GAAP net income) for the past 3 years. Q-Aqua currently trades at \$6.55 per share. In a recent press release, the company highlighted the fact that it had "... *positive operating income last year. In addition, sales have been growing at a rate of 25% per year for the past 2 years. Based on the fact the Q-Aqua trades at a <Price-to-Sales> ratio of only 2 and a <Price-to-Operating Income> ratio of only 7, the management believes that our company is currently undervalued.*"

As part of your research, you examined Q-Aqua's most recent annual financial statement and focused on the supplemental footnotes to the income statement. In particular, the footnotes state that the company "*entered into 17 water supply swap transactions in 2001 and 38 water supply swap transactions in 2002. We are conservative in accounting for these swaps in that we fully book for all revenues and expenses related to these transactions each year.*" Later in the same footnote, company management states that that "*We view the supply capacity received in these swap transactions as building of our overall capital abilities.*"

QUESTION 4: Cash Flow Analysis (20 pts)

Listed below is the summary balance sheet for FGST Corp for fiscal years ended 2001 and 2002 (all numbers in millions of dollars). The company reported net income in 2002 of \$1,400 million. FGST had no capital expenditures or asset sales in 2001 and 2002. Shares outstanding remained constant over the 2 years. The company's long-term debt matures in the year 2010.

Summary Balance Sheet <u>FGST Corp (all amounts in \$MM)</u>	Year ended <u>2002</u>	Year ended <u>2001</u>
Cash	2,600	1,500
Accounts Receivable (net)	4,900	3,200
Inventory	5,500	4,100
<u>Property Plant & Equipment (Net of Deprec)</u>	<u>29,500</u>	<u>32,500</u>
Total Assets	\$42,500	\$41,300
Accounts Payable	3,300	2,800
Accrued Liabilities	1,500	2,200
<u>Long Term Debt</u>	<u>25,400</u>	<u>25,400</u>
Total Liabilities	30,200	30,400
<u>Shareholders Equity</u>	<u>12,300</u>	<u>10,900</u>
Total Liabilities & Shareholders Equity	\$42,500	\$41,300

(a) Calculate CFO (cash flow from operations) for the fiscal year 2002. Please show all your work. State any assumptions you may make in deriving your calculations.

The company is expected to have relatively stable sales for the next 3 years (2003-2006).

(b) Do you expect the working capital accruals in 2003 to be higher, lower, or the same as working capital accruals reported in 2002? Provide reasons to support your answer.

(c) What do you expect free cash flow to equity (FCFE) to be in 2006? Please state any assumptions you make and provide reasons for your answer.