

Quiz 3: Valuation

Answer all questions and show necessary work. Please be brief. This is an open book, open notes exam.

1. Studio Inc. is a conglomerate with a banking subsidiary that it is planning to spin off as a stand alone entity. You have the following information on the subsidiary and on publicly traded banks:

	Bank Sub	Median Bank
Payout ratio in stable growth	90.00%	80.00%
Expected growth rate in perpetuity	1.00%	3.00%
Price to Book Ratio	NA	2.00

Estimate the price to book ratio for the subsidiary, assuming that the median bank is correctly priced (given its fundamentals). (3 points)

2. You are trying to price Qantas Telecom and have collected the following information on the company.

<i>Expected FCFF next year</i>		<i>Invested Capital (Book & Market)</i>		
After-tax Operating income	\$450		<i>Book Val</i>	<i>Market Val</i>
+ Depreciation	\$150	Equity	\$4,500	\$8,000
- Cap Ex	\$250	Debt	\$2,500	\$2,500
- Δ Working Capital	\$(10)	Cash	\$1,500	\$1,500
FCFF	\$360	Investments in other companies	\$1,000	\$2,000

The investments in other companies take the form of minority holdings. You have run a regression across telecom companies:

EV/Invested Capital = 1.75 + 60.00 Return on Capital - 30.00 Reinvestment Rate

(All values are in decimals; a 20% ROC will be entered as .20)

Given this regression, how under or over priced is the equity in the company? (4 points)

3. You are trying to value Churasco Inc, a company in two businesses and have been given the following information (in millions of dollars):

	FCFF	Cost of capital	Growth Rate	Net Debt
Steel	\$600.00	7.00%	2.00%	\$2,000.00
Chemical	\$600.00	9.00%	3.00%	\$1,000.00
Corporate G&A	\$(100.00)	7.50%	2.50%	

If there are 200 million shares in the company, trading at \$75/share, how much would you gain or lose as an activist investor, if you were able to buy the company at the prevailing market price and break it up into its parts. (You can assume that the corporate G&A is a necessary part of the business) (3 points)