

**Quiz A for 2:30 Class: 11/20/13**

Name \_\_\_\_\_

**Short Answer 1 (15 points):** What would you use for S when calculating the beta of a call on OneExchange Inc that expires five months from today? Be specific.

**Short Answer 2 (15 points):** What rate would you use when calculating PV(K) when determining the value of being able to abandon a project over the next three years if the project's cash flows end up being lower than expected? Be specific.

**Problem (75 points):** The beta of 3Million Products' equity is 1.3. Use the following information to set up the calculations needed to determine the beta of 3Million Products' assets and debt. Note: If you are solving for something other than the left-hand side of the equation, state what you are solving for.

Book values: equity = \$15 million, debt = \$8 million

Market values: equity = \$35 million, debt = \$6.5 million.

Promised payments on bonds: no coupons, but the bonds mature for \$10 million five years from today

Annual returns on Treasury securities by maturity: 1-year = 0.15%, 2-year = 0.28%, 3-year = 0.59%,  
4-year = 0.99%, 5-year = 1.25%, 10-year = 2.53%, 20-year = 3.51%, 30-year = 3.77%.

Return on bonds with the same credit rating as 3Million Products: 1-year = 5%, 2-year = 6%, 5-year = 9%,  
10-year = 10%, 20-year = 12%, 30-year = 15%.

Standard deviation of returns on: equity = 39%, debt = 9%

**Wall Street Journal Questions are on the back of this page.**