Bank & Financial Institution Modeling: – Certification Quiz Questions

Module 3 – Bank Valuation

11. You have selected a set of comparable public companies to value a commercial bank, but the companies in the set have very different CET 1 Ratios. So, you want to adjust each company for Excess or Deficit Capital based on a Targeted CET 1 Ratio of 12%.

    One bank's Equity Value is $2,000, its Tangible Book Value is $1,000, its CET 1 is $1,100, and its Net Income to Common is $100. This bank also has Risk-Weighted Assets of $8,000.
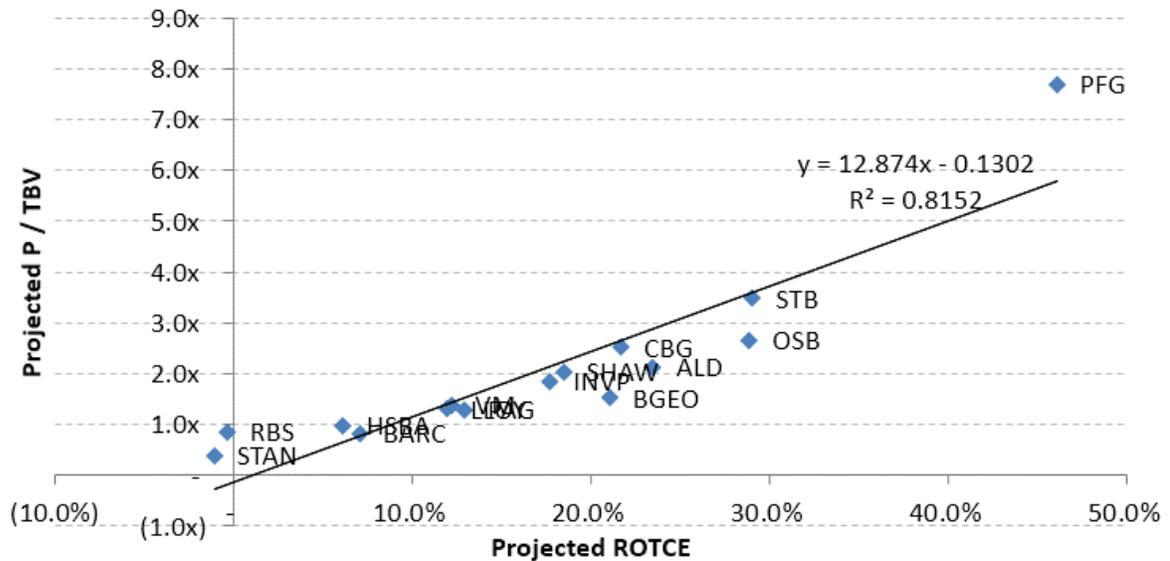
    What would this bank's P / E and P / TBV multiples be AFTER you adjust for Excess Capital? Assume a 40% tax rate and 2% rate of return on the Excess Capital.

    a. Adjusted P / TBV = 2.2x; Adjusted P / E = 18.9x.

    b. Adjusted P / TBV = 2.3x; Adjusted P / E = 20.3x.

    c. Adjusted P / TBV = 1.9x; Adjusted P / E = 21.0x.

    d. Adjusted P / TBV = 2.2x; Adjusted P / E = 18.8x.

    e. Adjusted P / TBV = 2.3x; Adjusted P / E = 20.2x.

12. Which of the following answers represent **CORRECT** statements about Stock Issuances, Stock Repurchases, and Stock-Based Compensation in a Dividend Discount Model for a commercial bank?

    This question has 2 correct answers and 2 incorrect answers. You must select BOTH correct answers and no incorrect answers to earn a point for this question.

    a. One valid approach is to set all these items to 0 in the projected years so that you do not have to adjust the company's share count at all.

b. Stock Issuances and Stock-Based Compensation tend to increase a bank's Implied Equity Value because they increase its Tangible Book Value, while Stock Repurchases have the opposite effect.

c. If you do include these items, you must adjust the bank's current share count by adding (Present Value of Future Shares Issued – Present Value of Future Shares Repurchased) / Bank's Current Share Price.

d. These items only impact a public bank's valuation because you only calculate implied per-share values for public companies, not private ones.

13. For which of the following banks would a Residual Income (Excess Returns) Model make the **MOST** sense as a supplemental analysis to the traditional Dividend Discount Model?

a. A mid-sized regional bank in a developed country that has maintained a 50% Dividend Payout Ratio for the past decade.

b. A mid-sized regional bank that has significant Excess Capital (e.g., 15% CET 1 vs. 10% for the peer companies) with no plans to increase Dividends or repurchase stock.

c. A small, high-growth bank that is not currently issuing Dividends, but which has an extremely high ROE (e.g., 2 – 3x its Cost of Equity).

d. A diversified money-center bank that is expected to grow its Loan portfolio in-line with GDP growth and keep issuing Dividends at a steady Payout Ratio in the future.

14. Since ROTCE and P / TBV tend to be closely correlated for commercial banks, you have created a Regression Analysis based on both metrics for a set of 15 U.K.-based banks. The screenshot below this question shows the analysis.

Which of the following conclusions can you draw from this Regression Analysis?

Regression Valuation Analysis - United Kingdom-Based Banks

Scatter plot with y-axis labeled "Projected P / TBV" ranging from (1.0x) to 9.0x, and x-axis labeled "Projected ROTCE" ranging from (10.0%) to 50.0%. Data points labeled: PFG, STB, OSB, CBG, ALD, SHAW, INVP, BGEO, VM, LLOY, HSBA, BARC, RBS, STAN. Trend line equation: $y = 12.874x - 0.1302$, $R^2 = 0.8152$

a. This analysis is not valid because a set of 15 banks is too large to be useful; you should narrow the set based on Total Assets, Net Income, or other financial criteria.

b. There's a fairly strong correlation, but the predictive function for P / TBV is not likely to be helpful since you're using projected figures rather than historical ones.

c. The fact that there's at least one outlier – PFG – reduces the usefulness of the analysis; you should remove this outlier to get a stronger correlation.

d. This Regression won't be especially useful for valuation purposes unless the company's Implied P / TBV is dramatically far off from its current multiple.

15. Which of the following statements **BEST** describe how Excess or Deficit Capital would affect all the valuation methodologies for a commercial bank?

This question has 2 correct answers and 2 incorrect answers. You must select BOTH correct answers and no incorrect answers to earn a point for this question.

a.   You may have to adjust the Public Comps by increasing or reducing each company's Equity Value, Book Value, Tangible Book Value, and Net Income.

b.   You're less likely to adjust the Precedent Transactions and Regression Analysis because the banks in these sets may target very different capital levels.

c.   You need to adjust the subject company's Current Book Value, Dividends, and ROE in both the Dividend Discount Model and Residual Income Model.

d.   Adjusting the Public Comps for Excess Capital will tend to increase their valuation multiples, while adjusting for Deficit Capital will do the opposite.