

Bank & Financial Institution Modeling:

– Certification Quiz Questions

Module 6 – Bank Buyout Model

1. If a private equity firm acquires 100% of a commercial bank using 100% Equity, which of the following statements are TRUE?

Statement #1: Most likely, the PE firm has joined with other firms in a “club deal” so that no single firm owns more than 20-25% of the bank.

Statement #2: A Returns Attribution Analysis for such a deal will be more similar to one for a growth equity deal rather than one for a traditional leveraged buyout.

Statement #3: The PE firm’s success or failure depends heavily on its ability to change this bank’s Targeted CET 1 Ratio and Dividend Payout Ratio.

Statement #4: The PE firm likely sees opportunities to boost this bank’s ROTCE, which should, in theory, also boost its P / TBV multiple.

- a. Only statements #2, #3, and #4 are true.
 - b. Only statements #1, #2, and #4 are true.
 - c. Only statements #3 and #4 are true.
 - d. Only statements #1, #3, and #4 are true.
 - e. Only statements #1 and #2 are true.
 - f. All the statements above are true.
2. Your firm is considering a 100% buyout of a commercial bank where the bank will also divest its underperforming Loans, recording a significant Loss in the process. The screenshot below shows the Purchase Price Allocation (PPA) Schedule for this deal:

Purchase Price Allocation:

Goodwill Calculation:	\$ in Millions
Equity Purchase Price:	\$ 273.7
(-) Seller Common Book Value:	(215.6)
(+) Write-Off of Existing Goodwill:	3.6
Total Allocable Purchase Premium:	61.6
(+) Loan Marks:	13.5
(-) Write-Down of Allowance for Loan Losses:	(54.3)
(+) Write-Down of Existing Intangible Assets:	15.6
(-) Core Deposit Intangibles (CDI) Created:	(9.5)
(-) Write-Up of Intangibles:	(6.2)
(-) Write-Down of Existing Deferred Tax Liability:	(22.1)
(+) New Deferred Tax Liability:	4.7
Total Goodwill Created:	\$ 3.4

Loan Marks:	\$ in Millions
FMV of Gross Loans % Book Value:	98.0%
Mark-to-Market Adjustment on Gross Loans:	(13.5)
Average Maturity of Loans (Years):	5.0

Core Deposit Intangibles:	\$ in Millions
Core Deposits % Total:	90.0%
Total Core Deposits:	954.7
Core Deposit Intangibles % Core Deposits:	1.0%
Core Deposit Intangibles:	9.5
Amortization Period (Years):	10.0

Intangible Asset Write-Up:	\$ in Millions
Purchase Price to Allocate:	\$ 61.6
% Allocated to Indefinite-Lived Intangibles:	10.0%
Indefinite-Lived Intangibles:	6.2
New Deferred Tax Liability:	\$ 4.7

Which of the following items is MISSING or INCORRECT in this schedule?

- You must record the Loan Divestiture and Loss within this schedule because both items affect the Goodwill created in the deal.
 - If the bank is planning to divest Loans, you should not mark its remaining Loans to fair market value.
 - Core Deposit Intangibles should not be created in this deal – they only get created if one bank acquires another bank.
 - The bank's Allowance for Loan Losses should not be written down because a PE firm, not a strategic acquirer, is doing the deal.
 - Nothing, i.e. none of the points above necessarily represents a missing or incorrect item.
- 3. In this same buyout deal where the bank also divests underperforming Loans, the returns to equity investors are too low, so few PE firms are interested.**

What's the most REALISTIC alternative scenario that might result in a higher IRR and MoM multiple for the equity investors?

- a. Look at the deal without this divestiture of underperforming Loans – the numbers may improve if there's no Loss that reduces the bank's CET 1.
 - b. Use 50% leverage in the deal (split between Senior and Subordinated Notes), and assume that the bank repays the Debt by the exit date.
 - c. Negotiate a lower upfront purchase price to reduce the investor equity contribution.
 - d. Assume that the bank issues no Dividends during the holding period, so that its Exit Tangible Book Value increases.
- 4. Which of the following Returns Attribution Analyses for a bank buyout deal is MOST positive for your assessment of that deal?**
- a. TBV Growth: 10%; P / TBV Multiple Expansion: 50%; Dividends: 40%.
 - b. TBV Growth: 40%; P / TBV Multiple Expansion: 60%; Dividends: 0%.
 - c. TBV Growth: 70%; P / TBV Multiple Expansion: 10%; Dividends: 20%.
 - d. TBV Growth: 60%; P / TBV Multiple Expansion: 60%; Dividends: (20%).
- 5. A private equity firm is considering a buyout of a regional bank. The bank's ROE is 15%, its Cost of Equity is 12%, and its Net Income Growth Rate is 2%, so its implied P / BV multiple is $(15\% - 2\%) / (12\% - 2\%) = 1.3x$.**
- The bank's Current Book Value is \$500 million, so its Implied Equity Value is \$650 million. To achieve a 25% IRR over 5 years, the PE firm must sell the bank for an Equity Value of approximately \$2 billion at the end of the period. The firm believes that the bank's Book Value will increase to \$1 billion after 5 years, and the bank does not plan to issue any Dividends during the holding period.**
- As a result, the P / BV multiple will need to expand from 1.3x to 2.0x to achieve this 25% IRR. What is the most PLAUSIBLE way to achieve this multiple expansion, given the numbers described here?**

- a. Increase the bank's ROE to 22% by the end of the holding period.
- b. Increase the bank's Net Income Growth to 9% by the end of the holding period.
- c. Reduce the bank's Cost of Equity to 8.5% by the end of the holding period.
- d. None of the above – these all seem unrealistic, so the firm must re-think its assumptions, pay a lower price, or get more Book Value growth.