GRADUATE SCHOOL of BANKING
AT LOUISIANA STATE UNIVERSITY

2018 Bank Study Project
Class of 2019

MANAGING BANK PERFORMANCE
Paul Allen

NOTES:

1. Please use 8 l/2" x 11" paper (or paper folded to that size).
2. Attach the **Junior Cover Sheet – Class of 2019** from http://www.gsblsu.org/students-4/ as the first page of your project.
3. Please staple your project or use a binder clip. **DO NOT** use paper clips.

Complete and mail by January 15, 2019

Graduate School of Banking at LSU
4273 Highland Road
Baton Rouge, LA 70808-4541
225-766-8595

Managing Bank Performance

Paul Allen

2018 Session

Introduction:

This Bank Study Project ("BSP") is based on material covered in the course, *Managing Bank Performance,* taught during the first week of the 2018 session of the Graduate School of Banking at LSU. Unless otherwise indicated, the answers to the BSP questions are to be based on the financial statements included within this problem.

Problem 1: The balance sheet and income statement for Purple Bank, as of and for the year ended December 31, 2016 and 2015 are presented as Exhibit A.

Part A:
Except for ROE and Loans to Deposits, calculate each of the following as a percent of total assets for each year using the data in the financial statements for Purple Bank. For ROE and Loans to Deposits, use Equity or Total Deposits, as the denominator in calculating the ratio.

Notes/comments for calculations:

1. Write your answers, rounded to 2 decimal places, below.
2. You do not need to try to calculate "average assets" or "average equity" for purposes of this exercise; you may use the ending assets or equity for each year, to calculate your answers.
3. For Loans to Deposits ratio, use net loans - that is, loans net of the allowance for loan losses – in calculating the ratio.
4. For the Efficiency Ratio, use the UBPR definition (Noninterest Expense divided by the sum of Net Interest Income plus Noninterest Income).

	Financial Statement Component	2016	2015
1	Interest Income		
2	Interest Expense		
3	Provision for Loan Losses		
4	Noninterest Income		
5	Noninterest Expense		
6	Total stockholders' equity		
7	Net Income (ROA)		
8	Return on Equity (ROE)		
9	Loans to Deposits Ratio (ignore Loans Held for Sale)		
10	Efficiency Ratio (Use NII before Provision)		

Part B:

The above information indicates that interest income/total assets increased in 2016.

- Identify 2 factors that hypothetically could have caused interest income/total assets to increase.
- Identify 2 strategies you would propose to achieve an increase in net interest margin for 2017, assuming no change in market interest rates.

Part C:

Refer to the Balance Sheet as of December 31, 2016 in Exhibit A.

Assume you are responsible for 2017 Strategic Planning:

- Identify one change in the Asset Mix that would improve the Net Interest Margin in 2017.
- Identify one change in the Liability Mix that would improve the Net Interest Margin in 2017.
- For each strategy, explain how the change in mix would improve the NIM, and what steps the Bank would likely take to implement the strategy.
- For each strategy, consider and discuss any significant obstacles in implementing the strategy (such as increase in operating expense to implement, increase in overall risk profile of the Bank, decrease in customer service/perception of value proposition to key customers).

Part D:

Assume you will be addressing stockholders at the Annual Meeting:

- Explain the change in Book Value per Share.
- Explain what might have caused the Bank to need to book a Provision for Loan Losses in 2016, although the Loans to Deposit ratio decreased.
- Assume a stockholder asked why the Bank appears to be holding so much in cash and cash equivalents; provide an answer to the question. In formulating your answer, assume that everyone expects market interest rates to increase in 2017 by 100 basis points and that general economic conditions appear to be improving in the Bank's geographic market.

Part E:

Explain whether the Efficiency Ratio improved or deteriorated from 2016 to 2015. What could Management do to improve the Efficiency Ratio in 2017?

Part F:

Estimate what ROA and ROE would have been in 2016, given the following assumptions:

- Assume that interest income was $1,500,000 higher than actual for 2016.
- Assume the Provision for Loan Losses was $500,000 higher than actual for 2016.
- Assume no changes in the ratios of interest expense/total assets, noninterest income/total assets and noninterest expense/total assets for 2016.
- Assume that the average tax rate (tax expense/income before taxes) remained the same.
- Assume asset and equity levels remain unchanged as any increase in net income is paid out in dividends prior to year-end.

Calculate the revised ROA and ROE percentages. Please show your calculations, rounded to 2 decimal places.

Problem 2: Presented below, are the ALCO Policy limitations for Gold Bank, for the maximum adverse change in Net Interest Income (NII) and Economic Valuation of Equity (EVE), under various interest rate shocks from the base case, for a static balance sheet. Also presented are the actual ALCO report results as of September 30, 2016, for Gold Bank, from the ALCO report package. Based on the information presented, answer the questions below.

ALCO Policy Limits:

	Limit on Decrease in NII		Limit on
Change	Year 1	Year 2	Change in
in Rates:	Mo 1-12	Mo 13-24	EVE
+/-100 bp	-8%	-10%	-10%
+/-200 bp	-10%	-15%	-15%
+/-300 bp	-12%	-20%	-20%
+/-400 bp	-15%	-25%	-30%

ALCO Report Results:

	NII		
	Year 1	Year 2	EVE
+400 bp	1.50%	15.40%	10.55%
+300 bp	1.41%	12.58%	8.64%
+200 bp	1.56%	8.78%	5.44%
+100 bp	0.83%	4.11%	3.13%
No Change	0.00%	0.00%	0.00%
-100 bp	-3.30%	-5.85%	-5.61%
-200 bp	-7.36%	-8.74%	-8.77%
-300 bp	-12.36%	-13.66%	-17.96%
-400 bp	-15.68%	-16.50%	-23.66%

Part A:

1. How would you describe Gold Bank's interest rate risk profile as of 9/30/16 – "asset-sensitive" or "liability-sensitive":
   a. With respect to earnings at risk?
   b. With respect to risk to EVE?
2. Is the Bank in compliance with the ALCO policy limits? If not, indicate what metric(s) the Bank is out of compliance with.
3. Would the use of loan floors adversely impact the Bank in the rates up 300 basis point scenario? In the rates down 300 basis point scenario?

Part B:

Gold Bank has just experienced a prolonged (over 5 year) period during which market interest rates were generally declining or flat, and hit historically low levels; economic forecasts are predicting market rates to begin a slow ascent upward over the next five years. The Bank's regulators have asked ALCO to identify and consider which ALCO assumptions should be considered "key" assumptions in the Bank's effort to predict IRR.

1. Should the Bank be concerned about experiencing a high level of loan prepayments over the next five years, given the current market interest rate cycle?
2. Discuss the likely impact (generally) on the Bank's EVE, if Gold Bank significantly increased (that is, lengthened) the decay assumption for non-maturity, non-interest bearing deposits, given the predicted increase in market interest rates. (You do not need to quantify your answer).