

**Individual Assignment for BANK2011: Banking and the Financial System**

Semester 2, 2019

Due: Wednesday 16 October 2019, 5:00 pm

**BANK & CAMELS ANALYSIS**

The assignment is designed to familiarize you with banking jargon, banking industry structure, accessing and using banking data and databases and a few key banking concepts and issues. The assignment requires you to gather information about banks in various forms and from various sources to analyze a bank's overall performance.

In Parts I and II of the assignment, you can choose any US bank you want to analyze. If you are unfamiliar with bank holding companies and want some help picking a bank to analyze, you can go to <https://www.ffiec.gov/NPW>, click on large holding companies with total assets greater than \$10 billion and look for a bank you might be interested in analyzing. Find the Name and Location of a BHC that interests you and then follow the directions below.

**SPECIAL NOTE ON BANK CHOICE FOR PARTS I AND II**

***Do not use a credit card bank (like Discover, Capital One, Macy's, Credit One) as you cannot find a standard peer group for credit card banks easily. Also, do not use Goldman Sachs or Bank of New York Mellon because they are not really traditional commercial banks. Also, do not use BMO Harris as they are a Canadian bank holding company. If you want to use BMO Harris, you must use the bank itself in Chicago as you will not find holding company information.***

**SPECIAL NOTES ON DATA ACCESS**

- 1. Because I never know when the FDIC will revise the data on banks, I want you to use the most recently available information available on the FDIC website.***
- 2. Do not wait until the night before the assignment is due to work on it! The data websites might be down and you will not be able to access the data.***

**Part I: To Show You How to Access FDIC and FFIEC Data: (15 Marks)**

Go to the FDIC web site <http://www.fdic.gov>

Click on Industry Analysis, Bank Data & Statistics, and then Institution Directory

Under tab Bank Holding Companies, enter a BHC Name or state and click on "Search."

Click on the Bank Holding Company Name. Find a bank holding company of your choice. Note the BHC ID, the number of banks (associated institutions or subsidiaries) it owns, and the asset size of the BHC. Under the heading "Institution Name" find the name of the bank with the largest amount of "Total Assets" We will call this the "lead bank." **Print out the page that lists the BHC and its banks.**

**This is your Report 1. [Required]**

Go to <https://occ.gov/index.html> and click on Search CRA Evaluations Page. Select state and enter the

name of the **lead bank** you identified above **not your BHC** and find your lead bank. Print out this page. Note that there might not be a recent rating and there might be numerous ratings for your bank. **This is your Report 2. [Required]**

Go to <https://www.ffiec.gov/npw/> and enter Institution Name or RSSD ID and state of your BHC and click "Search." Click on Bank Holding Company Performance Report (BHCP) and find Page 1, Summary Ratios (this will usually be the second page of the report). It will look like the report below. **This is your Report 3. [Required]**

BANK OF AMERICA CORPORATION		CHARLOTTE, NC		1073757 5 1			FR BHCP								
BHC Name		City/State		RSSD Number FR Dist Peer #			Page 1 of 23								
<b>Summary Ratios</b>															
	06/30/2017	06/30/2016	12/31/2016	12/31/2015	12/31/2014										
Average assets (\$000)	2,253,333,500	2,180,849,500	2,190,001,000	2,162,074,000	2,151,390,000										
Net income (\$000)	10,125,000	6,912,000	17,906,000	15,888,000	4,833,000										
Number of BHCs in peer group	106	97	100	93	90										
	BHC	Peer # 1	Pct	BHC	Peer # 1	Pct	BHC	Peer # 1	Pct	BHC	Peer # 1	Pct	BHC	Peer # 1	Pct
<b>Earnings and Profitability:</b>															
<b>Percent of Average Assets</b>															
Net interest income (tax equivalent)	2.04	2.85	14	1.76	2.89	11	1.96	2.80	14	1.89	2.81	15	1.93	2.88	15
+ Non-interest income	1.98	1.34	75	1.82	1.36	70	1.89	1.39	72	1.92	1.45	65	2.01	1.50	70
- Overhead expense	2.53	2.70	40	2.53	2.75	39	2.51	2.72	39	2.66	2.85	41	3.54	2.93	79
- Provision for loan and lease losses	0.13	0.14	58	0.18	0.22	55	0.16	0.17	50	0.14	0.17	53	0.10	0.14	48
+ Securities gains (losses)	0.01	0.01	72	0.04	0.02	76	0.02	0.01	71	0.06	0.01	89	0.06	0.02	90
+ Other tax equivalent adjustments	0	0	49	0	0	87	0	0	83	0	0	8	0	0	78
= Pretax net operating income (tax equivalent)	1.36	1.41	41	0.92	1.35	18	1.19	1.36	35	1.07	1.33	30	0.36	1.42	4
Net operating income	0.90	0.95	35	0.63	0.88	19	0.82	0.90	33	0.73	0.91	32	0.22	0.96	3
Net income	0.90	0.96	34	0.63	0.88	20	0.82	0.90	33	0.73	0.92	31	0.22	0.96	3
Net income (sub-chapter S adjusted)	1.10			0.99			1.54			1.41					
<b>Percent of Average Earning Assets</b>															
Interest income (tax equivalent)	2.87	3.65	14	2.50	3.63	10	2.70	3.57	11	2.68	3.57	13	2.76	3.71	10
Interest expense	0.58	0.55	64	0.51	0.46	89	0.50	0.49	63	0.55	0.46	71	0.58	0.49	69
Net interest income (tax equivalent)	2.28	3.11	15	1.99	3.16	12	2.20	3.06	15	2.13	3.09	14	2.18	3.18	13
<b>Losses, Allowance, and Past Due + Nonaccrual</b>															
Net loan and lease losses / Average loans and leases	0.39	0.23	82	0.44	0.28	80	0.41	0.27	82	0.48	0.31	81	0.47	0.30	80
Earnings coverage of net losses (X)	8.92	27.78	38	5.65	26.36	28	7.52	19.75	35	5.81	15.90	30	2.06	32.43	12
Allowance for loan and lease losses / Total loans and leases not held-for-sale	1.14	1.01	66	1.28	1.15	68	1.20	1.07	69	1.32	1.16	75	1.60	1.23	82
Allowance for loan and lease losses / Total loans and leases	1.13	0.99	65	1.27	1.13	70	1.19	1.04	69	1.31	1.14	76	1.57	1.22	81
Nonaccrued loans and leases + ORE / Loans and leases + ORE	0.79	0.77	57	1.01	0.98	59	0.90	0.88	59	1.12	0.97	67	1.59	1.09	76
30-89 days past due loans and leases / Total loans and leases (Confidential prior to March 2001)	0.63	0.43	76	0.70	0.50	75	0.86	0.51	84	0.89	0.58	78	1.06	0.60	84
<b>Liquidity and Funding</b>															
Net noncore funding dependence	13.51	16.92	43	9.18	17.89	24	11.75	18.62	38	11.33	18.17	32	16.97	17.27	54
Net short-term noncore funding dependence	-2.39	5.18	21	-7.70	4.75	12	-3.57	5.92	16	-5.38	4.31	19	-1.41	4.06	28
Net loans and leases / Total assets	42.13	62.31	15	42.06	63.71	12	42.75	61.97	16	42.78	62.72	15	42.83	61.49	18
<b>Capitalization</b>															
Tier 1 leverage ratio	8.89	9.61	31	8.88	9.64	33	8.93	9.40	39	8.60	9.68	28	8.20	9.82	20
Equity capital / Total assets	12.01	11.83	56	12.20	11.66	58	12.19	11.52	60	11.93	11.65	54	11.56	11.73	49
Equity capital + minority interest / Total assets	12.01	11.91	54	12.20	11.74	57	12.19	11.60	59	11.93	11.75	52	11.56	11.90	49
Tier 1 common equity capital / Total risk-weighted assets	12.34	12.36	60	11.90	11.88	59	12.07	12.16	56	11.62	12.08	52		11.92	
Net Loans and leases / Equity capital (X)	3.51	5.24	17	3.45	5.48	13	3.51	5.37	17	3.59	5.42	17	3.71	5.27	17
Cash dividends / Net income	23.38	27.73	37	26.81	30.46	36	23.76	29.05	34	22.49	28.06	31	47.71	27.42	84
Cash dividends / Net income (sub-chapter S adjusted)		14.19		54.16			-20.06			15.95					
Retained earnings / Average equity capital	5.75	5.74	50	3.85	5.13	28	5.13	5.34	43	4.89	5.29	46	1.06	5.69	6
<b>Growth Rates</b>															
Assets	3.03	7.96	31	1.75	7.13	18	1.95	8.31	21	1.93	7.61	18	0.09	9.24	10
Equity capital	1.47	8.85	22	6.12	6.78	51	4.15	7.99	45	5.23	5.87	55	4.64	9.53	32
Net loans and leases	3.19	8.28	29	2.07	8.73	18	1.89	8.51	17	1.81	9.31	13	-5.21	11.05	5
Noncore funding	11.86	0.57	77	-8.56	9.78	12	2.62	9.36	47	-6.93	5.64	26	-6.97	11.46	24
<b>Parent Company Ratios</b>															
Short-term debt / Equity capital	12.55	1.12	93	6.61	1.28	87	8.19	1.59	89	8.25	1.23	91	9.05	2.43	89
Long-term debt / Equity capital	55.15	13.44	88	59.20	12.29	93	55.35	13.44	88	59.54	12.95	92	64.41	10.76	93
Equity investment in subs / Equity capital	112.68	101.47	89	108.14	102.79	74	110.29	101.56	86	107.34	102.41	73	111.96	102.66	83
Cash FR op + noncash + op expenses / Op expenses + dividends	132.37	135.88	59	164.21	162.32	64	52.67	144.09	13	148.39	143.73	58	150.27	149.64	60

Put all the reports together in your appendix. You will need these reports for the analysis.

**Part II: Bank Performance Ratios and Comparison (10 Marks)**

Use most recent data available which will probably be June 2019

In this part of the assignment, you will graph a series of bank performance ratios for your bank and the other two comparison groups. All the data is on the websites and reports you printed for Part I. Make sure you use the correct peer group! It is important to recognize that the FDIC data is in thousands (i.e. \$15,000,000 on an FDIC report is not \$15 million but is \$15 billion). Also, commercial banks and savings institutions are not the same thing. I will want a three-year comparison using the most recently available data.

Go to FDIC site <https://www.fdic.gov/>.  
Go to industry analysis

Click on Bank Data and Statistics

Click on Statistics on Depository Institutions (SDI)

Create or Modify Comparison Reports

At the drop downs Select the number of Columns: 3

Click on "Select One." To get data for your bank, select Bank Holding Company and then find your BHC used in Part I above. Often times, you can use the BHC ID.

Enter your BHC in column 1, another BHC of your choice in column 2, and click on "Standard peer group" in column 3. In column 3, click on either Commercial Banks in your lead bank's size class or S&L's in your size class depending on whether your lead bank is a commercial bank or S&L. Make sure you get the right peer group! Remember the FDIC data is in 1000's, so if it says the assets of your bank are 2,000,000 that is \$2 billion.

Pick the most recent date for "Report Date." In the Report Selection box pick "Performance and Condition Ratios" and choose View, click next and your data should be there. Save to excel is a tab in upper right. Redo everything for the last two years (i.e. 2018 and 2017).

This will give you the data you need with the exception of the Net Noncore Funding Dependence which you have to copy by hand from the FFIEC report you did in Part I. From this report, write down the Net Noncore Funding Dependence Number for the last three years (i.e. 2019, 2018, 2017).

**This is your Report 4. [Required]. Put this report in your appendix.**

Using the data you downloaded or copied, graph each of these ratios for your bank and the other two for the last three years so you can do a mini CAMELS analysis in the later part. Use Excel and use line graphs with the years (most recent year on the right) on the horizontal axis. See example below. Make sure I can differentiate between your bank and the peer on your graphs! This means do them in color or use different symbols or lines to distinguish one from the other. Graph the following ratios for your bank, peer BHC, and the entire peer group:

**Note: These line numbers can change without me knowing it! Look for the actual accounting measure itself, not the line number.**

#### Capital Adequacy

1) Tier I risk-based capital ratio, line 32

#### Earnings

2) ROA, line 11

3) Net interest margin, line 6

4) Efficiency ratio, line 18

#### Liquidity

5) Net loans and leases to core deposits, line 28

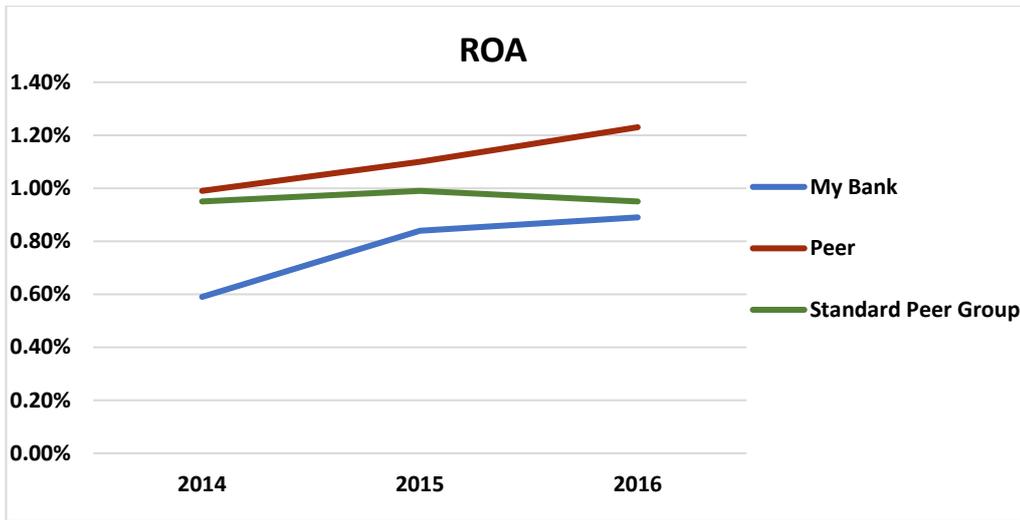
6) Net noncore funding dependence (from the FFIEC Report in Part I)

#### Asset Quality

7) Noncurrent Loans/Loans, line 25

8) the "coverage" (Loss allowance to noncurrent loans and leases) ratio, line 23

Your graphs should look like this (but the years and bank names will differ):



Under each graph, also include numerical values used to generate graphs like this:

	2014	2015	2016
My Bank	0.59%	0.84%	0.89%
Peer	0.99%	1.10%	1.23%
Standard Peer Group	0.95%	0.99%	0.95%

Now after your 8 graphs, use the information you have to predict the K/A ratio for your bank next year. In other words, using “Average assets and Average equity” from the Memoranda at the bottom of your “Performance and Condition Ratios” page (like lines 35 and 37) to determine your asset growth rate and current K/A ratio, line 11 for your ROA, and line 20 to figure out your retention ratio, fill in the values in this equation for your bank.

**Note:** You should have three lines on the graph for Net Noncore Funding Dependence. You should get this item from FFIEC Report. You can download the report for your BHC and peer BHC separately. Then you can take the Peer that the report includes (For example, it can display Peer # 1) as peer group.

**Include the following in your report for part II**

**Selected bank** \_\_\_\_\_

**Selected peer** \_\_\_\_\_

**In the same paragraph, discuss why you select this specific peer and peer group.**

Type in the below equation with “raw” data. Show me exactly what numbers you are using.

$$\Delta\left(\frac{K}{A}\right) = \rho \text{ ROA} - \left(\frac{K}{A}\right) \left(\frac{\Delta A}{A}\right)$$

using average equity and average assets in your calculations.

K/A ratio in one year will be current K/A \_\_\_\_\_

+  $\Delta\left(\frac{K}{A}\right)$  from above \_\_\_\_\_

= \_\_\_\_\_

*For part II, attach*

- 1) **The data for your bank and the two comparison groups. I need to see the data you used so I can grade part II.**
- 2) **All 8 graphs**

**Part III: CAMELS Analysis (25 marks)**

Now do the following. Assume that you are a regulator (**your perspective is that of a regulator**) doing a CAMELS analysis of the bank you chose in Parts I and II of the assignment.

First, grade each section C, A, M, E, and L (you do not have to do S) for your bank by comparing your bank to its peer bank and peer group.

**Note:** Even though I want you to focus on the information from the graphs you created in part II, you should also include other relevant information in your analysis of Capital and Management components. In particular, the discussion of the delta (K/A) equation (Capital component), the CRA rating (Management component), and management quality should be provided. Give each section a score of 1 to 5 - remember you can only use whole integers!

**You don't need to reprint the graphs here; feel free to refer to the graphs you had in part II in the above narrative.**

Then, give your bank an **overall** CAMELS score of 1 to 5 and explain briefly how you got your final score out of the 5 component scores above, i.e. what was most important dimension of CAMEL for you and why.

**Note: Do not get hung up on the "right" score to give each section. You are not experts in giving scores. What I really look for is that you effectively use CAMELS framework to evaluate bank's performance.**

## ***Formatting***

- a. The assignment should be no more than 2500 words with 1.5 line spacing and size 12 Times New Roman font. You may use smaller font for the presentation of your tables and graphs. Brevity and conciseness are key ingredients of a highly successful report.
- b. Make sure you use proper referencing in your assignment. Students should adhere to the Business School Referencing Guide at <http://sydney.edu.au/business/currentstudents/policy> (APA 6th style).
- c. On the title page, include course name, selected bank and peer bank, SID (do not include your name), and word count. Submit your report in PDF format.
- d. Assignments are to be submitted electronically via Turnitin.

***Your report should be no longer than 2500 words, but may be shorter.***

### **What's included in the word count**

- Executive summary
- Assignment body

### **What's excluded from the word count**

- Title page
- Tables and graphs
- References
- Appendices