Introduction - Earnings

As directors and shareholders, one of your primary focal points is how much money your bank earns. In addition to funding dividends, strong earnings performance allows your bank to grow, engage in new activities, remain competitive, and help maintain adequate capital levels. Regulators share a similar level of appreciation for earnings performance; however, our primary focus is on your bank's ability to augment capital. In this module, we will discuss how examiners evaluate earnings and give you some helpful tips for monitoring income and expenses using the UBPR. Go to the "Next" button below to begin the instructional content for earnings.

Instructional Content – Earnings

How do examiners evaluate and rate earnings?

Examiners evaluate earnings from several different angles. We are going to touch on some of the main concepts that we use that you may find helpful as you review and discuss your bank's earnings performance. Examiners will assess:

- Level, trend, and stability of earnings Examiners will look for earnings fluctuations and try to determine the cause of those fluctuations. We use this information to estimate future earnings, taking into account items such as the next item.
- Quality and sources of earnings Are the primary sources of income from normal banking activities that you can rely on in the future? We will try to assess the amount that is attributable to non-recurring sources like extraordinary gains or investment trading activities.
- **Ability to augment capital through retained earnings** The examiner's analysis will focus on this factor, especially in times of rapid growth or increasing risk.
- Exposure to market risks For most banks, this exposure is centered in interest rate risk. Maintaining higher levels of interest rates risk can create dramatic swings in income and could have negative implications for future earnings.
- **Provisions for loan losses** If the allowance for loan losses is not adequate for the risk identified in the loan portfolio, additional provisions will be necessary, which will lower net income.

Analyzing Earnings

One of the most useful and comprehensive sources of financial data on your bank is the UBPR – the Uniform Bank Performance Report. The UBPR is available free of charge at www.ffiec.gov. We will focus on just a few key earnings ratios that will help you monitor earnings performance. One fairly standard approach to this analysis is to follow what regulators typically refer to as the "Earnings Analysis Trail". It focuses on the following five items found on the *Summary Ratios* page of the UBPR under *Earnings and Profitability*.

Net Income

Logically, the first item to look at is the bottom line to determine how well the bank is doing overall. The line item listed as Net Income in the *Earnings and Profitability*

section is also known as Return on Assets (ROA). The ratio is calculated by dividing net income (after all expenses and taxes) by average assets.

Net Interest Income

The second step on this earnings analysis trail is the line item Net Interest Income (NII). This ratio is calculated by subtracting total interest expense from total interest income and dividing the result by average assets.

Non-Interest Income

The line item for Non-Interest Income mainly consists of service charges and miscellaneous account fees and is usually the second major type of bank income. Like the other ratios we have reviewed, this ratio is measured as a percentage of average assets.

Overhead Expenses

Overhead is accounted for as Non-Interest Expense on the UBPR. This item includes all operating expenses except for interest expense and provisions for loan losses. This line item includes expenses such as salaries, depreciation, consulting fees, and supplies. This ratio is more fully detailed on page 3 of the UBPR.

Provision for Loan Losses

The last item that we will discuss in the *Earnings and Profitability* section is the Provision for Loan Losses. Our main concern here is whether the provisions are adequate to maintain the Allowance for Loan Losses at an appropriate level. If the allowance is too low relative to risk in the loan portfolio, additional provisions will be necessary, which must be taken out of earnings.

UBPR – Summary Page

In the *Earnings and Profitability* section of the Summary page for First State Bank, review the five ratios that we just talked about:

- Net Income
- Net Interest Income
- Non-interest Income
- Non-interest Expenses (overhead expenses)
- Provision for Loan Losses

CERT# 12345 FIRST STATE BANK
CHARTER# 311 COUNTY: MADISON SUMMARY RATIOS

COUNTY: MADISON	SUMMARY RATIOS									
2000	1			;			1			
x000)		,			,			,		
	BANK		DOT	BANK	,	דים	BANK		PCT	
DFITABILITY:	DAME	FEER	101			101	DAME	runc	101	
AGE ASSETS:										
E(TE)	828	7.79	හ	7.74	7.56	62	7.67	7.49	66	
NSE	3.63	3.55	æ	3.36	333	51	334	331	51	
COME(TE)	465	424	66	4.38	4 24	58	433	4.18	61	
NCOME	(0.52)	0.75	38	0.58	0.74	35	(0.50 \	0.72	38	
CXPENSE	289	292	46	2.64	295	34	2.53	287	33	
N&LEASE LOSSES	037	0.16	ิด	0.16	0.17	49	0.16	0.14	51	
TING INCOME (TE)		190	ഒ	2.16	1.85	75	214	187	81	
	(1.14)	126	49	(1.39)	1 23	ഒ	(137)	124	59	
	\sim									
AV EARN ASSET	4.89	4.53	67	4.51	4.55	ß	4.44	4.48	45	
ALYSIS:				ASSET (QUALITY					
E TOTAL LN&LS	0.22	0.12	84	0.14	0.12	56	0.16	0.14	56	
VTOTAL LN&LS	1.13	1.28	43	1.30	1.29	55	126	1.3	48	
LS/ GROSS LN&LS	3.11	0.81	89	1.01	0.83	62	1.02	0.79	63	
				LIQUI	DITY					
D. DEPENDENCE	21.76	15.22	68	1525	15.09	53	15.05	14.72	54	
ES TO ASSETS	76.94	65.74	76	65.01	64.04	SS	63.23	66.18	47	
				CAPIT	'AL					
E CAPITAL	8.08	9.11	41	9.61	9.09	56	9.18	9.14	54	
NET INCOME	60.55	40.04	88	59.61	40.54	89	55.69	40.35	89	
	33.60	8.58	78	2.77	7.23	14	1.63	8.68	15	
	5.89	12.81	42	6.21	12.78	38	7.51	12.45	37	
CS	62.56	12.92	æ.	6.59	11.71	32	1.13	9.72	20	
TIMENTS	-50.88	11.28	15	2.37	13.61	35	5.58	11.03	41	
ORE FUNDING	35.43	8.16	78	1.91	8.14	37	233	12.14	36	
	DOTTABILITY: AGE ASSETS: E (TE) NSE COME (TE) NCOME EXPENSE NÆLEASE LOSSES TING INCOME (TE) ALYSIS: E TOTAL LNÆLS YTOTAL LNÆLS YTOTAL LNÆLS D. DEPENDENCE ES TO ASSETS E CAPITAL O NET INCOME	### BANK DESTABILITY: AGE ASSETS: E (TE)	1231,2004 182,836 2,984 BANK PEER	1231,2004 182,836 2984 EANK PEER PCT	1231,2004 182,836 2,984 EANK PEER PCT EANK	1231/2004 1231/2008 1245/180 1245/18	12/31/2004 12/31/2008 145,180 2,018	1231/2004 1231/2005 145,180 2018 2	1231/2004 1231/2006 1231/2006 1231/2006 143,130 143,130 143,130 1961	

What has caused the decline in net income?

[Answer:] **Net Income** declined noticeably over the last 12 months, from 1.39% to 1.14%, and is now below the peer average. The largest contributor to this decline was a rise in the **Non-Interest Expense** (**Overhead**), coupled with a rise in **Provision Expense**. Partially offsetting these rising expenses was the rise in **Net Interest Income**. However, the increase in **Interest Expense** is noteworthy because it suggests that the bank may lack access to core deposits and is now required to pay more to fund its rapid growth. The increase in **Non-interest Expense** totaled 25 basis points over the last 12 months and will be more fully detailed when we look at page 3 of the UBPR. Additionally, when we move on to the examination exercise, we will see that despite the 21 basis point increase in the **Provision Expense**, the allocation was not sufficient given added risk in the portfolio resulting in a revised ROA. The earnings comment in the Report of Examination states that due to asset quality weaknesses, the bank will need to make an additional \$500,000 in provisions that will lower the ROA to 0.87%.

Now, let's dig a little deeper into the UBPR to find out more about what is going on in this bank. Specifically, let's determine (1) if the interest income on loans is rising as we expect, and (2) what is the cause for the 25 basis point rise in overhead expenses. Review the following ratios:

- Yield on Total Loans
- Personnel Expenses as a Percent of Average Assets

CERT# 12345		Page 3									
CHARTER# 311 COUNTY: MADISON	NONINTEREST INCOME & EXPENSE (\$000) & YIELDS										
NONINTEREST INCOME & EXPENSES:		12/31/200	14		12/31/200	13	12/31/2002				
DEPOSIT SERVICE CHARGES	400				360			416			
OTHER NONINTEREST INCOME		55	50	372			429				
NONINTEREST INCOME		95	50	832			845				
MEMO: FEE INCOME		27	12	260			305				
PERSONNEL EXPENSE		2,99	8	1,945			1,989				
OCCUPANCY EXPENSE		69	05		59	5	601				
OTHER OPER EXP(INCL INTANGIBLES)		1,59	91		1,17	8	1,205				
TOTAL OVERHEAD EXPENSE		5,28	4	3,718			3,795				
ASSETS PER DOMESTIC OFFICE		49,26	57		36,295			35,785			
NUMBER EQUIVALENT EMPLOYEES		7	ro		7	0		68			
PERCENT OF AVERAGE ASSETS:	BANK	PEER	PCT	BANK	PEER	PCT	BANK	PEER	PCT		
PERSONNEL EXPENSE	(1.64)	1.56	72	(1.34)	1.53	31	(1.39)	1.56	33		
OCCUPANCY EXPENSE	0.38	0.42	47	0.41	0.42	48	0.42	0.43	49		
TOTAL OVERHEAD EXPENSE	2.89	2.92	47	2.64	2.87	39	2.53	2.95	41		
YIELD ON OR COST OF:											
TOTAL LOANS & LEASES (TE)	(9.06)	8.74	67	(9.08)	8.59	63	(8.96)	8.39	69		
TOTAL INVESTMENT SECURITIES (TE)	5.84	5.74	54	5.68	5.66	51	5.49	5.31	58		
INTEREST-BEARING BANK BALANCES	NA	3.55	35	NA	2.81	39	NA	3.32	32		
FEDERAL FUNDS SOLD & RESALES	2.47	2.37	89	2.49	2.57	17	2.62	2.69	39		
TOTAL INT-BEARING DEPOSITS	3.81	3.41	68	3.64	3.18	65	4.63	4.19	84		
TRANSACTION ACCOUNTS	2.35	2.33	51	2.79	2.2	65	2.94	2.25	67		
MONEY MARKET ACCOUNTS	2.99	2.58	62	2.89	2.23	63	2.76	2.3	64		
OTHER SAVINGS DEPOSITS	3	2.64	75	3.05	2.58	80	3.04	2.61	77		
TIME DEPS OVER \$100M	5.44	5.02	81	5.07	4.87	77	5.03	4.79	79		
ALL OTHER TIME DEPOSITS	5.52	5.34	72	5.45	5.18	81	5.46	5.16	83		
FEDERAL FUNDS PURCHASED & REPO	2.31	2.28	56	2.16	2.16	51	2.19	2.14	53		
OTHER BORROWED MONEY	4.39	4.16	56	3.82	3.43	56	3.77	3.37	56		
ALL INTEREST-BEARING FUNDS	4.01	3.87	60	3.69	3.62	58	3.69	3.62	58		

If the yield on total loans and leases went down, how is it that interest income as a percent of average assets (Summary Page) went up?

[Answer]

Answer: While the yield on total loans declined slightly, the balance sheet shifted a large quantity of assets from securities to loans. Even though the yield on the loan portfolio declined, this was still substantially higher than the yield on the securities the new loans replaced.

CERT# 12345		FIRST STATE BANK							Page 3		
CHARTER# 311 COUNTY: MADISON	NONINTEREST INCOME & EXPENSE (\$000) & YIELDS										
NONINTEREST INCOME & EXPENSES:	12/31/2004				12/31/2003			12/31/2002			
DEPOSIT SERVICE CHARGES	400			360			416				
OTHER NONINTEREST INCOME		55	50	372			429				
NONINTEREST INCOME		95	50	832			845				
MEMO: FEE INCOME		27	72	260			305				
PERSONNEL EXPENSE		2,99	78	1,945			1,989				
OCCUPANCY EXPENSE		69	95	595			601				
OTHER OPER EXP(INCL INTANGIBLES)		1,59	91	1,178			1,205				
TOTAL OVERHEAD EXPENSE		5,28	34	3,718			3,795				
ASSETS PER DOMESTIC OFFICE		49,26	57	36,295			35,785				
NUMBER EQUIVALENT EMPLOYEES		7	70		7	0		68			
PERCENT OF AVERAGE ASSETS:	BANK	PEER	PCT	BANK	PEER	PCT	BANK	PEER	PCT		
PERSONNEL EXPENSE	1.64	1.56	72	1.34	1.53	31	1.39	1.56	33		
OCCUPANCY EXPENSE	0.38	0.42	47	0.41	0.42	48	0.42	0.43	49		
TOTAL OVERHEAD EXPENSE	2.89	2.92	47	2.64	2.87	39	2.53	2.95	41		
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TOTAL INVESTMENT SECURITIES (TE)	5.84	5.74	54	5.68	5.66	51	5.49	5.31	58		
INTEREST-BEARING BANK BALANCES	NA	3.55	35	NA	2.81	39	NA	3.32	32		
FEDERAL FUNDS SOLD & RESALES	2.47	2.37	89	2.49	2.57	17	2.62	2.69	39		
TOTAL INT-BEARING DEPOSITS	3.81	3.41	68	3.64	3.18	65	4.63	4.19	84		
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OTHER BORROWED MONEY	4.39	4.16	56	3.82	3.43	56	3.77	3.37	56		
ALL INTEREST-BEARING FUNDS	4.01	3.87	60	3.69	3.62	58	3.69	3.62	58		

Why did Non-Interest Expense (Overhead) rise so dramatically?

[Answer]

Answer: Personnel expenses increased 30 basis points, accounting for most of the rise in Overhead Expenses. If you happened to look above this line at the line item "Number of Equivalent Employees", you would have noticed that it remained the same, at 70. What does this tell us? This tells us that the bank is paying higher wages versus hiring more employees.

CERT# 12345		Page 3								
CHARTER# 311 COUNTY: MADISON	NONINTEREST INCOME & EXPENSE (\$000) & YIELDS									
NONINTEREST INCOME & EXPENSES:	12/31/2004				12/31/2003			12/31/2002		
DEPOSIT SERVICE CHARGES	400			360			416			
OTHER NONINTEREST INCOME		55	50		372			429		
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TOTAL OVERHEAD EXPENSE		5,28	34	3,718			3,795			
ASSETS PER DOMESTIC OFFICE		49,26	57	36,295			35,785			
NUMBER EQUIVALENT EMPLOYEES		(m)	70				68		
PERCENT OF AVERAGE ASSETS:	BANK	PEER	PCT	BANK	PEER	PCT	BANK	PEER	PCT	
PERSONNEL EXPENSE	(1.64)	1.56	72	(1.34)	1.53	31	(1.39)	1.56	33	
OCCUPANCY EXPENSE	0.38	0.42	47	0.41	0.42	48	0.42	0.43	49	
TOTAL OVERHEAD EXPENSE	2.89	2.92	47	2.64	2.87	39	2.53	2.95	41	
YIELD ON OR COST OF:										
TOTAL LOANS & LEASES (TE)	9.06	8.74	67	9.08	8.59	63	8.96	8.39	69	
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INTEREST-BEARING BANK BALANCES	NA	3.55	35	NA	2.81	39	NA	3.32	32	
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ALL INTEREST-BEARING FUNDS	4.01	3.87	60	3.69	3.62	58	3.69	3.62	58	

As you can see, the UBPR provides a wealth of financial information about your bank. Remember, you can access this document free of charge at www.ffiec.gov.

This should give you a general idea as to what is happening with regard to this bank's earnings position. Please use the "Next" link below to read the bank's earnings comment in the Report of Examination.

Examination Conclusions and Comments

EARNINGS

The bank's historically strong earnings performance has been impacted by deterioration in the loan portfolio and rising overhead expenses. Net income is overstated by \$500,000 due to an inadequate Allowance for Loan and Lease Losses, which has not increased despite significant loan growth. After making the required provision, Return on Assets (ROA) declines to 0.87% from 1.14%, as reported on the December 31, 2004, UBPR. This is well below the peer group ratio of 1.26%.

Rising overhead expenses are also impacting earnings. Overhead costs as a percentage of average assets increased 25 basis points over the past year. The majority of this increase is the result of the new loan officer incentive program introduced to facilitate the bank's rapid loan growth.

Net Interest Income

Despite the bank's dramatic growth in higher risk loans, net interest income has increased only slightly. This is because of the higher cost of funds and aggressive loan pricing associated with the bank's rapid growth objectives. Also, deteriorating loan performance has hampered loan yields.

Future Earnings Prospects

The outlook for improved earnings performance is uncertain at this time given the bank's increasing risk profile. Although the budget projects a 1.2% ROA for the current year, it does not address the bank's deteriorating asset quality, including:

- The increasing volume of non-performing loans
- The need for additional provisions for loan losses
- The likely need for additional personnel expenses to address deficiencies in the lending function

Management must address these issues to prevent further earnings deterioration and restore earnings to historical levels.

Discussion Points - Earnings

The Report of Examination identified a number of concerns with regard to earnings: the new incentive plan for loan officers is the main reason overhead expenses have risen, examiners are concerned with the costs associated with managing future loan problems, and earnings appear to be overstated. These weaknesses make it uncertain whether earnings will be able to support future bank growth through capital augmentation. Critical points noted:

- Net income is overstated by \$500,000 due to an inadequate Allowance for Loan and Lease Losses
- The revised ROA declined to 0.87% after making the necessary provision
- ROA is well below the peer ratio of 1.26%
- Net interest income has increased only slightly, despite the balance sheet shift towards loans, because of a higher cost of funds and aggressive loan pricing
- Overhead expenses are rising due to the loan officer incentive program
- The bank's ability to fully augment capital with future earnings is uncertain due to:
 - The increasing volume of non-performing loans
 - The need for additional provisions for loan losses
 - The likely need for additional personnel to address deficiencies in the lending function

Going forward the directors will need to:

- Reevaluate the bank's growth strategy
- Assess the quality/ability of the lending staff
- Change the loan officer incentive program to incorporate loan quality instead of quantity
- Reevaluate the loan pricing strategy
- Pay for a more thorough loan review program
- Explore the need to hire additional staff to address the loan problems

Keep these items in mind as you rate the earnings component.

Rating Earnings

Now let's rate the earnings component for First State Bank. The following is an excerpt from the Uniform Financial Institutions Rating System.

Uniform Financial Institution Rating System

This rating reflects not only the quantity and trend of earnings, but also factors that may affect the sustainability or quality of earnings. The quantity as well as the quality of earnings can be affected by excessive or inadequately managed credit risk that may result in loan losses and require additions to the allowance for loan and lease losses, or by high levels of market risk that may unduly expose an institution's earnings to volatility in interest rates. The quality of earnings may also be diminished by undue reliance on extraordinary gains, nonrecurring events, or favorable tax effects. Future earnings may be adversely affected by an inability to forecast or control funding and operating expenses, improperly executed or ill-advised business strategies, or poorly managed or uncontrolled exposure to other risks. The rating of an institution's earnings is based upon, but not limited to, an assessment of the following evaluation factors:

- The level of earnings, including trends and stability
- The ability to provide for adequate capital through retained earnings
- The quality and sources of earnings
- The level of expenses in relation to operations
- The adequacy of the budgeting systems, forecasting processes, and management information systems in general
- The adequacy of provisions to maintain the allowances for loan and lease losses and other valuation allowance accounts
- The earnings exposure to market risk such as interest rate, foreign exchange, and price risks

Ratings

- A rating of "1" indicates earnings that are strong. Earnings are more than sufficient to support operations and maintain adequate capital and allowance levels after consideration is given to asset quality, growth, and other factors affecting the quality, quantity, and trend of earnings.
- A rating of "2" indicates earnings that are satisfactory. Earnings are sufficient to support operations and maintain adequate capital and allowance levels after consideration is given to asset quality, growth, and other factors affecting the quality, quantity, and trend of earnings. Earnings that are relatively static, or even experiencing a slight decline, may receive a "2" rating provided the institution's level of earnings is adequate in view of the assessment factors listed above.
- A rating of "3" indicates earnings that need to be improved. Earnings may not fully support operations and provide for the accretion of capital and allowance

- levels in relation to the institution's overall condition, growth, and other factors affecting the quality, quantity, and trend of earnings.
- A rating of "4" indicates earnings that are deficient. Earnings are insufficient to support operations and maintain appropriate capital and allowance levels. Institutions so rated may be characterized by erratic fluctuations in net income or net interest margin, the development of significant negative trends, nominal or unsustainable earnings, intermittent losses, or a substantive drop in earnings from the previous years.
- A rating of "5" indicates earnings that are critically deficient. A financial institution with earnings rated "5" is experiencing losses that represent a distinct threat to its viability through the erosion of capital.

What do you think earnings should be rated?

- 1 Strong (link to the answer below)
- 2 Satisfactory (link to the answer below)
- 3 Less than satisfactory (link to the answer below)
- 4 Unsatisfactory (link to the answer below)
- 5 Critically deficient (link to the answer below)

[Answer:] Examiners rated earnings a "3". After adjusting for an inadequate Allowance for Loan and Lease Losses, ROA declined significantly from 1.39% to 0.87% in only one year. This ratio is substantially lower than peer and weaknesses in credit underwriting and administration suggest that future earnings will suffer further. This rating also considers that capital is currently less than satisfactory (which you will find out when reviewing the Capital module) and takes into account the bank's elevated risk profile, which places greater demands on earnings to restore capital to a satisfactory level.

Now let's move on to the asset quality module.