Session 3 – Banking Lines of Business & Bank Management

OBJECTIVES

Provide you some insight into leading and managing a bank exploring the following areas:

- Review our Current Bank Environment
- Retail Management
- Lending Portfolio Management
- Asset/Liability Management

Have some fun in the process!

CURRENT BANK ENVIRONMENT

Opening Small Group Exercise

Here is your task over the next 10 minutes:

- ✓ Brainstorming – Regardless of your experience in the financial services industry, please create your top five list of issues you believe are currently having a competitive impact on the financial services industry.

- ✓ Appoint a spokesperson (the individual whose birthday is closest to today) and be ready to share your group's brainstormed ideas with the class.

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- Economic Challenges

- Mergers and Acquisitions

Trends	1993	2000	2014	2020
Commercial Banks	10,959	8,315	5,607	4,375
New Charters	58	190	1	2
Problem Institutions	575	94	291	56
Failed Institutions	50	7	12	4
# of FDIC Employees	20,994	6,452	6,631	5,770

- Products & Services

- Regulatory & Legislative Issues

Customer Perceptions related to:

Emergency Economic Stabilization Act of 2008 – included in the troubled Assets Relief Program (TARP) – created "Too Big to Fail"

2010 Regulation E, Electronic Fund Transfers Act – POS and ATM opt-in

2010 Dodd Frank Act – Creation of the Consumer Financial Protection Bureau (CFPB) – has not been completely implemented and now will see significant repeals

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- Non-Bank Competition
    - ✓ Farm Credit
    - ✓ Credit Unions
    - ✓ Brokerage Companies
    - ✓ Suppliers: Seed, Machinery, etc.
    - ✓ Others: Wal-Mart, State Farm Bank
    - ✓ Phone Apps (Venmo, Zelle, Apple Pay)

> "Merrill Lynch's cash management account allows you to borrow against securities, write checks, deposit your paycheck . . . and do about everything else you could do at a bank plus a lot more."
>
> *Source: Fortune Magazine*

Competitive Landscape – What is our end game?

_____________________________ the number of ________________________ banking with you!

Success comes down to our ability to ____________________ & ___________________________

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Ordinary or EXTRAORDINARY?

Working with your Team, please answer the following questions. We will come back together as a large group to discuss in a few minutes.

What comes to mind when you hear Ordinary?
1
2
3
4
5

What comes to mind when you hear EXTRAORDINARY?
1
2
3
4
5

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Small Group Exercise

Criteria	Mega Bank	Your Community Bank
Locations:		
Marketing Dollars Available:		
Product Offerings:		
Pricing on Deposits (i.e., interest rates):		
"Too Big to Fail" (i.e., Safety and Soundness):		
Customer Culture and Service Orientation:		

Analysis

Now, let's answer some questions about our banks by reviewing the information on the previous page.

1. In your opinion, what advantages does Mega Bank have over *Your Community Bank?*

   ➔ ______________________________________

   ➔ ______________________________________

   ➔ ______________________________________

   ➔ ______________________________________

   ➔ ______________________________________

2. In your opinion, what advantages does *Your Community Bank* have over Mega Bank?

   ➔ ______________________________________

   ➔ ______________________________________

   ➔ ______________________________________

   ➔ ______________________________________

   ➔ ______________________________________

3. In thinking about competitive advantages, which one of these banks must consistently focus on EXTRAORDINARY (vs. ordinary) in your opinion?

   ➔ ______________________________________

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RETAIL MANAGEMENT

Our Customer Experiences

Would you agree with this statement?
As a customer I want to feel. . .

W________________________________, R_________________________________ &

S____________________________________?

Where do **YOU** go today and experience this?

Customer Experience - Common Themes

- Take ___________ of me
- "____________" Experience
- Make it _______________
- Provide ______________________ or _________________________.
- I got your __________

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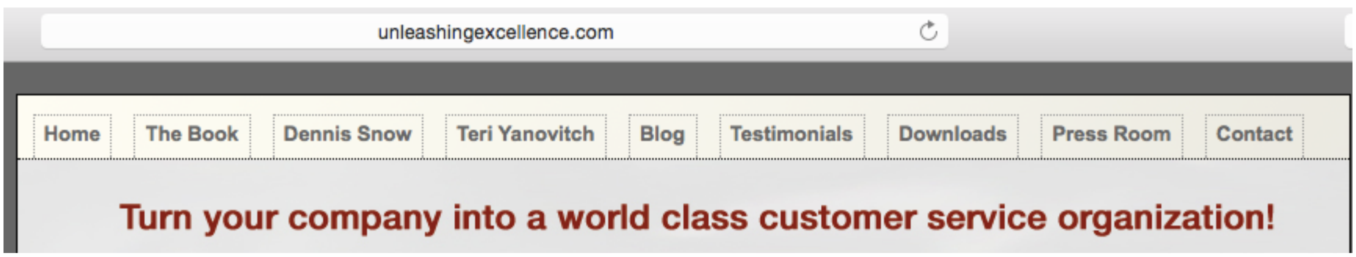
See EVERYTHING through the lens of your customer!

Looking at your organization from the customer perspective is one of the performance elements that separates ___________________ organizations from ___________________ones.

EVERYTHING Speaks!

Unleashing Excellence – Dennis Snow & Teri Yanovitch



Review your . . . Website Brochures Lobby

Teller line Your Office

Your Appearance Your Forms

Why is this important?

Why Do Banks Lose Customers?

1%	Customer Dies	9% Better Competitive Offerings
3%	Customer Moves	14% Product Dissatisfaction
5%	Influenced by Friends	68% ___________________________

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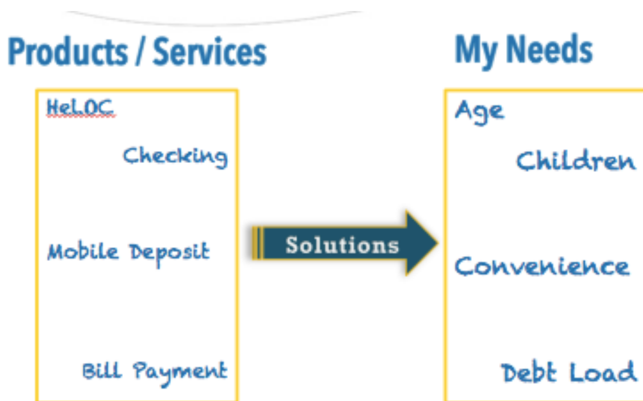

Breakdown the barriers by department – you are all on one team from the lens of the customer

LENDING PORTFOLIO MANAGEMENT

Loans to Consumers

- Unsecured – Why make this type of loan?
- Car – Secured by ________________?
- Home Improvement – HELOC (Home Equity Line of Credit)

  Secured by ____________________?
- Debt Consolidation -– Secured by ________________?
- Recreational (boats, RV's, vacations) – Secured by ________________?
- Student Loans

Loans to Businesses

- Term loans for Land, Equipment or Capital Purchases – Secured by ____________ ?
- Operating Lines of Credit – Typically renewed and reviewed annually –

  Secured by ______________?
- SBA or FSA Guaranteed Loans – limits the bank's exposure - Secured by

  ________________?
- Covid PPP Loans –

Let's not forget:

- Overdrafts
- Secondary Mortgage Market (Residential Real Estate Lending)
- Loan Participations

Loan Participation – Example

Loan to Customer	2,000,000	7%
Lead Bank	1,000,000	7%
Participating Bank #1	500,000	6.5%
Participating Bank #2	500,000	6.5%
Lead Bank – servicing fee 1,000,000		50 bp or .5% ($2,500 x 2) $5,000 total

Does your bank buy or sell participation loans?

Lending – Impact on Earnings

Interest Income – Impact on Earnings

Total Operating Income	
Interest Income - Loans	*80.0%*
Interest Income -Investments	*10.3%*
OD Fees/Service Charges	*5.0%*
All Other	*4.7%*
	100.0%

Total Operating Expenses	
Interest Expense - Deposits	*39.0%*
Salaries & Benefits	*32.0%*
Equipment/Occupancy	*7.8%*
All Other Expenses	*18.5%*
Provision for Loan Loss Reserve	*2.7%*
	100.0%

What does this look like for your bank?

Credit Decisions

6 C's of Credit

1. ___________________make the loan?

- Legal (Federal & State Laws, Contractual Age)
- Lending policy

2. ___________________of the borrower or borrowing entity?

- Past credit history with your bank
- Credit history with others (Credit bureau report)

3. ___________________of the borrower or borrowing entity?

- Income sources
  Self-Employed
  Seasonal work
  W-2 employment

- Verification of Income
  Tax returns, pay stubs, employment verification

- Stability
  Length of time in current job
  Length of time in location/area
  Employment History

- Financial Capacity
  Debt/Income ratio – With new payment included – typically total payments should not exceed 35-40% of gross income.

4. ___________________of the borrower or borrowing entity?

- Net Worth (financial statement)
- Amount invested by borrower (down payment capacity)

5. __________________of the borrower or borrowing entity?

What is the collateral?
- Real Estate (Land)
- Crops
- Home
- Crops
- Equipment
- Inventory, Receivables
- Vehicles
- Certificate of Deposit
- Cash Value of Life Insurance

Where is the collateral?
- Location
- Control of
- Availability

Is the collateral marketable?
- Demand
- Value
- Ease of disposing

6. ___________________of the borrower or borrowing entity?

- Repayment terms
- Loan Agreement
- Lien position
- Insurance on borrower
- Reporting requirements to the bank

Approaches to Credit Decisions

1. Manual Review – Following Established Guidelines

   Examples: Debt/Income ratio
   Acceptable past credit history
   Job Stability
   Down payment (equity)

2. Credit Scoring – Assignment of points to application data and credit bureau data to arrive at a final score predicting the odds of repayment

   Sample Credit Scoring characteristics:

   Application data
   Length of time at present employer
   Rent/Own

   Credit bureau data
   # of Open Revolving accounts
   Credit bureau score
   Judgments/Late payments
   Ratio of High Credit Available/Utilization

3. Combination (Scoring & Manual)

   Scoring can be used to filter out the obvious turndowns and a manual review at a certain score level or below **OR** manual review prior to all final decisions.

   Example of a possible Decision Matrix:

CREDIT SCORE	DECISION
> 740	Auto Approval
680 – 740	Manual Review
< 680	Auto Decline

Sample Credit bureau report – See Handout

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Profits/Net Income vs. Cash Flow

What is most important?

What's the difference?

_________________________ refers to making money

_________________________ refers to collecting money (good measure to find out where the cash goes)

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Elements of a Loan Policy

- Philosophy of the bank
- Minimum loan standards
- Loan authority levels by position
- Process for exceptions to policy
- Pricing guidelines
- Documentation requirements for all loan types
- Process of handling problem loans

Loan Policy Management

- INTERNAL Management
  Board of Directors
  Directors Loan Committee
  Loan Committee
  Senior Loan Officer
  Internal Auditors
  Loan Officers

- EXTERNAL Management
  FDIC
  State Examiners
  OCC
  Independent Auditors
  FHLB – Collateral Review

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What are the Lender's Responsibilities?

_______________________ & ___________________________ the risk to the Bank.

Match the loan purpose, ____________, maturity & source of repayment to the borrower's cash flow.

Properly _____________________________ the loan (term, risk, collateral).

Review ________________________ with the borrower.

Word Bank

Structure
Size
Quantify
Performance
Identify

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Managing the Loan Portfolio

- Use of Loan Policy – "____________________________" in the daily lives of the lenders.

- Loan Committee – Communication

- Yield & Mix of portfolio

- Risk Rating systems

- Concentrations

- Economic Factors

- Bank's Legal Lending Limit

- Adequate Loan Loss Reserve (ALLR)

Yield/Mix Discussion

	Average Yield
Securities Portfolio	?
Loans	
Commercial Loans	?
Installment Loans	?
Ag Loans	?
Real Estate Loans	?

Mix Considerations:

Size of loan
Expertise required
Time commitment
Level of Risk
Collateral

Risk Rating System

Risk Rating Systems are designed to assess the risk level of individual loans. This is strongly encouraged by regulators (if not required).

Risk Rating	Level of Risk	Benchmarks
1	Lowest	Overall business credit Asset quality Financial – key ratios Debt capacity and coverage Management and depth Position in the market (market share) longevity
2	Modest	
3	Average	
4	Acceptable	
5	Acceptable with risk	
6	Watch	
7	Special Mention	
8	Substandard	
9	Doubtful	
10	Loss	

Concentrations

- Industry
- Borrower
- Geographic

Economic Factors

Lending Limit Considerations

One example of calculating a bank's legal lending limit:

25% of Capital + Surplus

$21 Million Bank -	$600,000
$100 Million Bank -	$1,200,000

Other Considerations:
State Charter vs. National Character
Regulatory limit vs. Internal limit

Definitions:

Tier I Capital:	Total capital (core capital + reserves) Less mark-to-market adj.
Tier II Capital:	Tier I + ALLR

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Allowance for Loan Loss Reserve (ALLR)

Reserve funds held in anticipation of any credit losses (charge-off's) that may occur. (Insurance policy)

- Managed by the Senior Loan Officer or Loan Committee
- Reviewed and approved by the Board of Directors at least quarterly to be deemed adequately funded.
- Target: 1-2% of Total loans

Summary Page Sample of Reserve Adequacy	
Impaired Loans	$64,631
Commercial Loans	$18,440
Installment Loans	$7,428
Ag Loans	$14,291
Real Estate Loans	$40,992
Charge Off History	$37,231
Environmental Factors	$6,000
Estimate Allowance:	**$189,013**
Balance in Reserve:	**$188,532**
Surplus/Shortage:	**-$481**

Lending Case Studies – handout

Small Group Exercise

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Today's Challenges in Lending

- Competition – Pricing
- Competition – (including Non-Bank Competitors)
- Growth
- Economic Factors
- Profitability (Net Interest Margin)
- Talent
- Other Sources of Income (Fee Income generation)

ASSET/LIABILITY MANAGEMENT

Definition – Asset/Liability Management is the strategic planning, implementation, and control processes that limit interest rate risk to minimize negative effects on earnings and capital.

Goal - of Asset/Liability Management – to minimize interest rate risk so as to achieve a stable, but high Net Interest Margin.

Yield Curve - Graph of Treasury yields from three months to 30 years.

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Net Interest Margin (NIM):

Earning assets – assets producing interest income for the bank

Cash	Y	N
Fed Funds Sold	Y	N
Loans	Y	N
Investments	Y	N
Building & Contents	Y	N

Interest-bearing liabilities – liabilities causing interest expense for the bank

Fed Funds Sold	Y	N
Free Checking-DDA	Y	N
Money Market	Y	N
Retail CD's	Y	N

What about . . .

OD or services charges? (Income)	Y	N
Utilities?(Expense)	Y	N
Salaries? (Expense)	Y	N
Loan Fee income? (Income)	Y	N

Net Interest Income = Total Interest Income – Total Interest Expense

Net Interest Margin = $\dfrac{\text{Net Interest Income}}{\text{Earning Assets}}$

Total Interest Income: $5,200,000
Total Interest Expense: $2,300,000

Total Assets: $72,000,000
Earning Assets: $68,700,000

NIM:

National Bank
Calculation of Net Interest Margin

Assets	Balance (in millions)	X	Rate	=	Annual Interest Income
Investments	54		8.0%		$4.32
Loans	36		10.5%		$3.78
Federal Funds	1		4.0%		$ .04
Earning Assets	91				$8.14
Non-Earning Assets					
Cash	4				
Fixed Assets	2				
Other Assets	3				
Total Assets	100				$8.14

Liabilities	Balance		Rate		Annual Interest Expense
DDA	10		0%		$ .00
NOW	15		4.0%		$ .60
MMDA	10		5.0%		$ .50
Savings	5		3.5%		$ .18
Time CDs	50		6.0%		$3.00
Total Deposits	90				$4.28
Capital	8				
Other Liabilities	2				
Total Liabilities	100				$4.28

Net Interest Income = Total Interest Income – Total Interest Expense
= $8.14 – 4.28 = $3.86

$$\text{Net Interest Margin (ratio)} = \frac{\text{Net Interest Income}}{\text{Earning Assets}}$$

$$= \frac{\$3.86}{91} = 4.24\%$$

INTEREST RATE RISK

INTEREST RATE RISK
(An Example)

		YEAR 1	2	3	4	5
Asset -	$100 Loan (5 yr, 9% fixed rate, principal due at maturity)	______	______	______	______	______
Liability -	$100 CD (1 yr, 5%)	______	______	______	______	______
	$$NET INTEREST INCOME:	______	______	______	______	______
	%%NET INTEREST MARGIN: (Ratio)	______	______	______	______	______

ASSUMPTIONS

FOR YEAR 2:
In an effort to stimulate the economy, the President encourages the Fed Open Market Committee (FOMC) to lower the Fed Funds target rate. The Federal Reserve Chairman concedes, lowering the rate from 6.50% to 5.50%. The Treasury yield curve responds: all yields drop by the same 1% (100 basis points (bp)). Bank CD rates also follow suit, dropping 100 bp, as does the prime rate from 9.50 to 8.50%.

FOR YEAR 3:
Since the rate cuts made last year, people are finding that saving their money is not earning them very much. They began to spend, spend, spend, causing inflation to rise to 8%/year. In an effort to slow the economy, the FOMC raises the discount rate 200 bp. All other yields follow suit.

FOR YEAR 4:
The 200 bp increase last year did nothing to slow the economy. GDP is growing at 10%/year and inflation is at 12%/year. The FOMC meets again and agrees that drastic measures are needed to slow the pace. They increase the discount rate an additional 300 bp. All rates follow suit.

FOR YEAR 5:
The year 4 drop in Net Interest Margin to zero caused the bank to experience their largest loss in the history of the bank. This loss eroded their capital position to a point the regulators were forced to come in and close the institution. Therefore, there are no assumptions for year 5.

Why did net interest margin change by so much with the interest rate shifts?

What could have been done to produce a more stable net interest margin?

MEASURING & MANAGING INTEREST RATE RISK

Understanding Rate Sensitivity & GAP

Remember from earlier – only those that are rate sensitive:

Earning assets – assets producing interest income

	Do we have control over?	
Fed Funds Sold	Y	N
Loans	Y	N
Investments	Y	N

Interest-bearing liabilities – liabilities causing interest expense

	Do we have control over?	
Fed Funds Sold	Y	N
Free Checking-DDA	Y	N
Money Market	Y	N
Retail CD's	Y	N

Which options do we have control over? (Circle which one)

Products tied to Prime	Control or No Control?
Products tied to Libor	Control or No Control?
Internal Base Rate-Loans	Control or No Control?
Indexed CD	Control or No Control?

GAP Model

- ✓ Provides a snapshot approach to interest rate risk
- ✓ Definition of GAP: difference between rate sensitive assets and rate sensitive liabilities (RSA - RSL = GAP) within a given time frame, such as one year

- ✓ Positive GAP: RSA > RSL
  "Asset Sensitive" — If Rates go ↑ NIM ↑
  If Rates go ↓ NIM ↓

- ✓ Negative GAP: RSA < RSL
  "Liability Sensitive" — If Rates go ↑ NIM ↓
  If Rates go ↓ NIM ↑

- ✓ Zero GAP: RSA = RSL — If Rates go ↑ or ↓ NIM holds

Repricing Frequency	0 - 3 months	4 - 6 months	7 - 12 months	2 years	3 - 5 years	>5 years
EARNING ASSETS						
Loans	0	0	0	0	100	0
TOTAL RSA	0	0	0	0	100	0
IB LIABILITIES						
CD	0	0	100	0	0	0
TOTAL RSL	0	0	100	0	0	0
GAP (RSA – RSL)	0	0	(100)	0	100	0
CUMULATIVE GAP	0	0	(100)	(100)	0	0

** 1 YEAR GAP IS NEGATIVE → LIABILITY SENSITIVE

** EFFECT ON NET INTEREST INCOME:

GAP X INT RATE MOVEMENT	=	EFFECT
-100 X -1.00%	=	+$1.00
-100 X +2.00%	=	- $2.00
-100 X +3.00%	=	- $3.00

In reality, there are many assets and liabilities making up the GAP report. The concept of GAP, however, is the same. Your bank's GAP Model will contain investments by maturity date, adjustable rate loans, passbook savings accounts, etc. Place them in the appropriate "bucket" by maturity or repricing date (whichever is earliest), and subtract RSL from RSA for each period's GAP. Remember, this is just an estimate since there are many assumptions and variables in the model.

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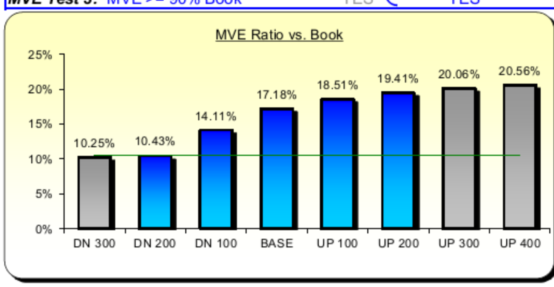
Tools Beyond or in Addition to GAP

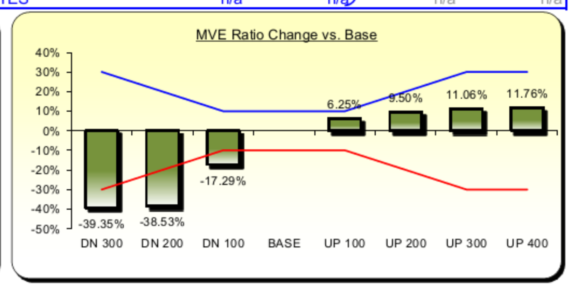
✓ Economic Value of Equity (EVE): the economic value of assets minus the economic value of liabilities. Economic value is a representation of today's value of all of the future cash flows inherent in the bank's balance sheet.

DYNAMIC MARKET VALUE OF EQUITY — a forward looking estimate of economic value; uses a SHOCKED disc.rate vs. proj. book yield on a STATIC (No Growth) Balance Sheet.

Uses Modified Retention Rate Methodology

	Curr Pos 12/16	DN 300	DN 200	DN 100	BASE	UP 100	UP 200	UP 300	UP 400
Total Assets (000's)	478,861	482,940	481,192	477,415	470,437	460,921	451,171	441,431	431,648
Total Liab (000's)	437,018	437,198	434,773	414,505	396,992	385,118	374,317	364,444	355,553
Mtg Serv (000's)	8,898	4,195	4,195	5,193	8,898	11,683	13,308	14,466	15,934
Off Bal Sheet (000's)	0	0	0	0	0	0	0	0	0
MVE (incl. Adjust.)	**50,741**	49,937	**50,614**	**68,103**	**82,342**	**87,486**	**90,162**	91,454	92,029
MVE Ratio (incl. Adj.)	10.60%	10.25%	10.43%	14.11%	17.18%	18.51%	19.41%	20.06%	20.56%
Min. MVE Ratio		6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
%Δ MVE		-39.35%	-38.53%	-17.29%		6.25%	9.50%	11.06%	11.76%
%Δ MVE Upper		30.00%	20.00%	10.00%		10.00%	20.00%	30.00%	30.00%
%Δ MVE Lower		-30.00%	-20.00%	-10.00%		-10.00%	-20.00%	-30.00%	-30.00%
Book Multiple		0.98X	1.00X	1.34X	1.62X	1.72X	1.78X	1.80X	1.81X
MVE Test 1: MVE ratio >= 6.00%		YES	YES	YES	YES	YES	YES	YES	YES
MVE Test 2: %Δ MVE < Guideline		*NO*	*NO*	*NO*		YES	YES	YES	YES
MVE Test 3: MVE >= 90% Book		YES	YES	YES		n/a	n/a	n/a	n/a



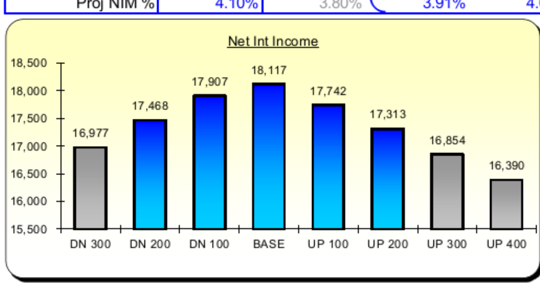


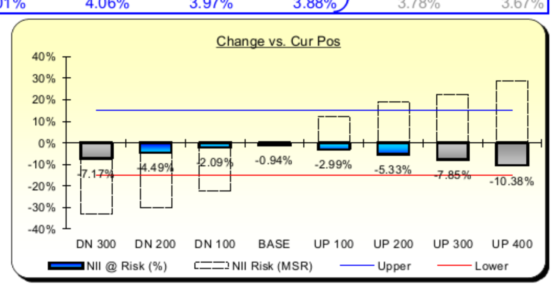
✓ Earnings-At-Risk: an estimate of how much net income will change when interest rates change by a specific amount.

INCOME SIMULATION — Represents a gradual **(ramped)** change in rates over a ONE YEAR horizon, including beta's as defined in the Addendum.

Earnings @ Risk

YEAR 1	Curr Pos 12/16	DN 300	DN 200	DN 100	BASE	UP 100	UP 200	UP 300	UP 400
Interest Income	19,069,735	17,239,787	17,751,032	18,247,388	18,906,164	19,332,530	19,705,102	20,047,062	20,384,408
Interest Expense	780,869	262,359	282,807	340,138	789,129	1,590,497	2,391,865	3,193,233	3,994,601
Net Int Income	**18,288,866**	16,977,428	**17,468,225**	**17,907,250**	**18,117,035**	**17,742,033**	**17,313,238**	16,853,829	16,389,807
Mtg Serv. Rights	0	(4,702,404)	(4,702,404)	(3,704,978)		2,785,852	4,410,562	5,568,145	7,201,870
Off Bal. Sheet	0	0	0	0	0	0	0	0	0
Net Non Int Exp	(8,650,560)	(8,650,560)	(8,650,560)	(8,650,560)	(8,650,560)	(8,650,560)	(8,650,560)	(8,650,560)	(8,650,560)
Net Inc. B4 Tax	**9,638,306**	3,624,464	**4,115,261**	**5,551,712**	**9,466,475**	**11,877,326**	**13,073,239**	13,771,415	14,941,117
NII @ Risk (%)		-7.17%	-4.49%	-2.09%	-0.94%	-2.99%	-5.33%	-7.85%	-10.38%
NII @ Risk ($)		(1,311,438)	(820,640)	(381,615)	(171,831)	(546,832)	(975,628)	(1,435,036)	(1,899,058)
NII Risk (MSR)		-32.88%	-30.20%	-22.34%		12.24%	18.78%	22.60%	28.99%
Upper Guide		15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Lower Guide		-15.00%	-15.00%	-15.00%	-15.00%	-15.00%	-15.00%	-15.00%	-15.00%
w/in Guideline		YES	YES	YES	YES	YES	YES	YES	YES
Proj NIM %	4.10%	3.80%	3.91%	4.01%	4.06%	3.97%	3.88%	3.78%	3.67%





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- ✓ Vendors who specialize in developing and producing your ALCO reports
  Peer report information

	Your Policy Guidelines				PEER Comparison			
	Current Position	ALCO Policy Update: Mar-15		w/in Policy	UBPR GRP 3	Custom PEER	BancPath AVG	UBPR Top Quart*
EARNING RATIOS	12/31/2016	Lower	Upper		Sep-2016	Sep-2016	Nov-2016	Sep-2016
Return on Assets	1.55%	> 1.00%		YES	0.94%	0.99%	1.14%	1.17%
Return on Equity	14.94%	> 8.00%		YES	9.93%	12.99%	10.67%	12.53%
Yield on Earning Assets	4.27%				4.19%	3.98%	3.80%	4.58%
Yield on Sec (TE)	4.50%				2.47%	2.90%	2.28%	2.97%
** Yield on Ln (TE)	4.24%				4.98%	4.58%	4.65%	5.33%
Cost of Funds	0.28%				0.54%	0.42%	0.45%	0.27%
Net Interest Spread	3.99%	> 3.00%		YES	3.53%	3.53%	3.35%	3.87%
Free Funds Ratio	37.14%				20.75%	21.71%	29.74%	
Net Interest Margin %	4.10%	> 3.00%		YES	3.76%	3.65%	3.49%	4.12%
Net Operating Margin	2.16%				1.49%	1.53%	1.67%	1.85%
Daily Margin $'s	50,106							
Break-Even Yield	2.11%				2.62%	2.42%	2.29%	1.64%
Efficiency Ratio	65.02%				65.41%	66.16%	73.57%	57.78%
LIQUIDITY								
Net Loans/Deposits	94.33%		< 115.00%	YES	81.24%	90.14%	77.46%	93.16%
Net Loans/Assets	80.83%				67.91%	75.41%	62.87%	78.10%
Net Loans/ Fund Src	94.33%				81.24%	90.14%	72.32%	93.16%
Liquidity Ratio	12.87%	> 10.00%		YES			31.34%	
Liqu Ratio (w Avail. FHLB)	36.97%						66.14%	
Reliance on Wholesale	13.58%				17.94%	13.02%	25.92%	
Net Non Core Funding	11.96%				6.20%	6.80%	14.36%	-1.22%
Short Term Non Core	11.65%				7.53%	7.10%	15.88%	3.45%
Liquid Assets/Tot Assets	3.33%						21.17%	
Liquid Assets/Tot Liab	3.72%						31.52%	
S-T Assets/Tot Liab	12.59%							
CoreDep/Tot Assets	76.74%				76.36%	78.14%	62.99%	82.27%
BALANCE SHEET								
Earning Assets/Assets	91.52%				93.11%	94.51%	94.65%	94.81%
Int Brg Dep/Tot Dep	63.39%				83.35%	81.97%	74.84%	89.34%
Ln Loss Res/Loans	1.10%				1.32%	1.70%	1.35%	1.58%
Non Perf / Tot Assets	0.40%				0.83%	0.32%	1.38%	0.29%
CAPITAL RATIOS								
Equity/Assets	10.40%	> 8.00%		YES	10.71%	9.96%	10.64%	11.87%
Tier 1 / Total Assets	10.59%	> 8.00%		YES	10.31%	9.62%	11.45%	11.34%
*** Tier 1 / Total RWA	12.06%				14.32%	12.20%	15.58%	16.38%
*** Tier 1 + Tier 2 / RWA	13.08%	> 10.00%		YES	15.44%	13.44%	15.58%	17.57%
Class. Assets / Tier 1 + Res	2.22%				9.50%	4.79%	12.01%	3.71%

Complications in All Methods:

- ✓ Availability of good data
- ✓ Assumptions
  - Prepayments on loans
  - Early terminations on CD's
  - Floors/caps on adjustable rate loans and investments

CALCULATING NET INTEREST MARGIN

Small Group Exercise

Net Interest Margin Exercise

			========== INCOME ===========		
Assets Amount		**Current Yield**	**Year 1**	**Rates Rise Year 2**	**Rates Fall Year 2**
$10,000	Variable Rate Commercial Loans (based on prime)	6.0%			
5,000	Investments – 5 Year T-Notes	6.0%			
5,000	Fed Funds Sold	3.0%			
$20,000	Total Interest Income:				

			========== EXPENSE ==========		
Liabilities + Capital Amounts		**Current Yield**	**Year 1**	**Year 2**	**Year 2**
$3,000	Demand Deposit Accts	0.0%			
4,000	Passbook Savings (3% rate – won't change)	3.0%			
11,000	1Yr CD (Rate=1Yr T-Bill)	4.0%			
18,000	Total Liabilities				
2,000	Capital				
$20,000	Total Interest Expense:		______	______	______
	Net Interest Income:		______	______	______
	Net Interest Margin:		______	______	______

Directions:

1. Assume there are no other assets or liabilities. Calculate Interest Income, Interest Expense, Net Interest Income, and Net Interest Margin for Year 2. (a) Assume market interest rates rise by 100 bp; (b) market rates fall by 100 bp.

2. Without a GAP Model, can you tell if this bank is asset sensitive or liability sensitive in the one year time frame? If so, how?

Session 3 – Banking Lines of Business & Bank Management

INVESTMENT PORTFOLIO GOALS

- L______________________
- Asset/Liability Management
- E______________________
- Community Development

Liquidity – Ability to raise cash quickly without adversely affecting earnings

- Other ways to raise funds quickly
    - correspondent ("upstream") bank borrowing – unsecured & secured
    - Federal Home Loan Advances
    - Brokered CD's

Asset/Liability Management – Strategic planning, implementation, and control processes that limit interest rate risk to minimize negative effects on earnings and capital

Maximize Earnings – Within the constraints of the first two goals, to invest in securities offering the highest total return

Community Development – To support local community development through the extension of credit to the area municipalities

Liquidity Exercise #1

ABQ Bank

Assets:	**Current Balance**
Loans	20,000,000
Long-Term Investments	10,000,000
Short-Term Investments (liquid assets)	5,000,000
TOTAL	35,000,000
Liabilities and Capital:	
Deposits	32,000,000
Other Borrowings	0
Capital	3,000,000
TOTAL	35,000,000

ABQ Bank projects loans could increase by $5,000,000 over the next six months due to an upswing in local economic development. However, due to the extremely low interest rate environment, consumers seem to be moving their savings (i.e., deposits) into stocks and mutual funds. For this reason, the bank projects deposits could fall by $2,000,000 over the next six months. ABQ Bank does not like to utilize "other borrowings" except in emergencies and only on an overnight basis.

Questions:

1. If ABQ Bank's projections are accurate, what amount of cash will be needed to fund the loan increase and depositors' withdrawal of funds?

2. Does the bank have enough short-term investments it can convert to cash quickly to meet the need for funds? Why or why not?

3. What can ABQ Bank do to better position themselves for the next six months?

Small Group Exercise

Liquidity Exercise #2

Daily review of Balance Sheet- what affects "bank" cash position(liquidity)?

What accounts are used to be our balancing/funding accounts at the end of each day?

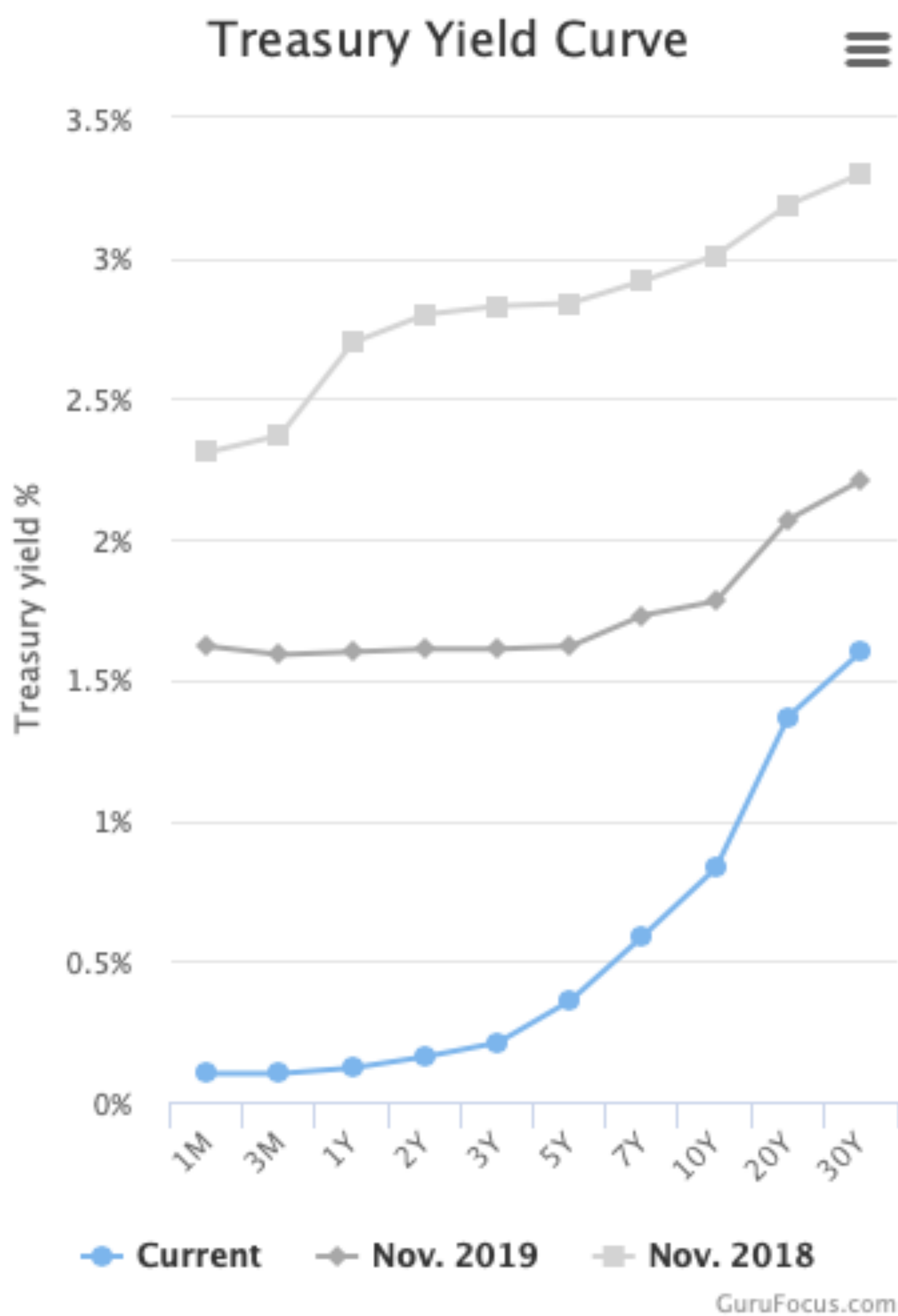
______________________ & _______________________

Solve…Bank's cash position

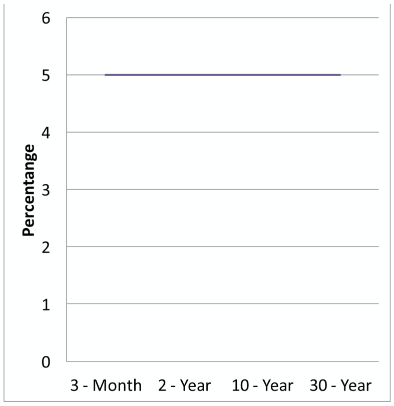
Fed Funds Sold Balance		**$1,000,000**
Security maturing	+ or -	$500,000
Purchase FHLB Advance	+ or -	$500,000
Loans increase	+ or -	$1,000,000
Deposit decrease	+ or -	$500,000

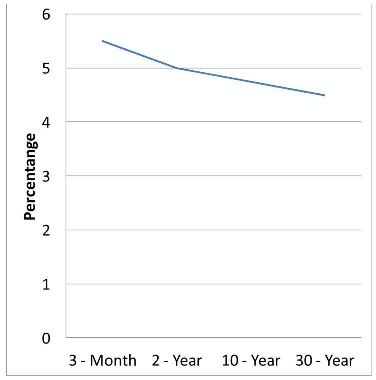
Net Cash Position: ______________

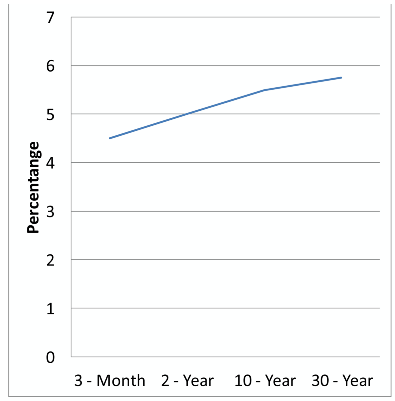
Session 3 – Banking Lines of Business & Bank Management


Treasury Yield Curve
3.5%
3%
2.5%
2%
1.5%
1%
0.5%
0%
Treasury yield %
1M
3M
1Y
2Y
3Y
5Y
7Y
10Y
20Y
30Y
Current
Nov. 2019
Nov. 2018
GuruFocus.com

Yield Curve Definition Exercise







Which type of yield curve:

- Moderate growth assumptions
- Stable interest rate forecast
- No changes or material events foreseen

Answer: ________________________________

Which type of yield curve:

- Pending recession
- Anticipation of lower interest rates in the future

Answer: ________________________________

Which type of yield curve:

- Increased Business Activity and spending
- Anticipation of higher interest rates in the future
- Increased uncertainty as to interest rate environment

Answer: ________________________________

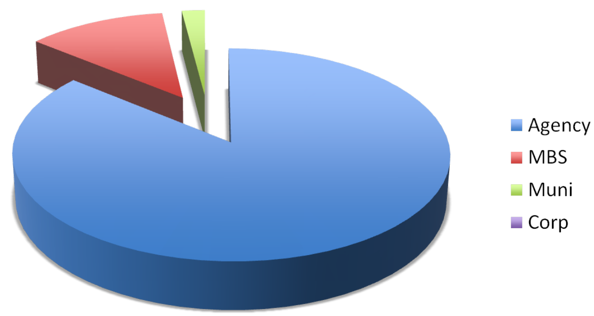
Session 3 – Banking Lines of Business & Bank Management

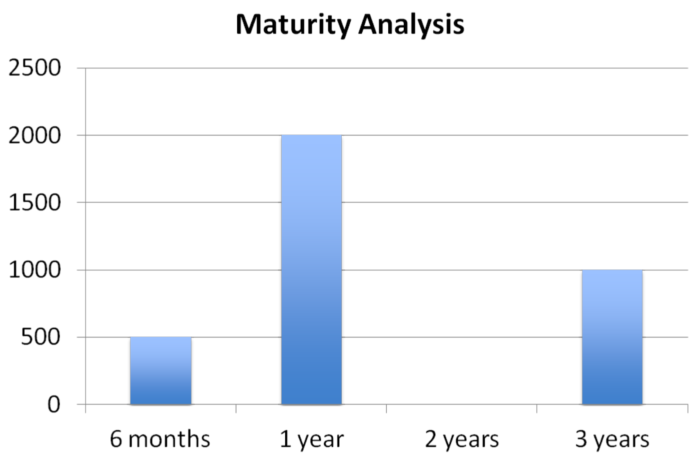
Review of Security Types – Get to Know your Bank

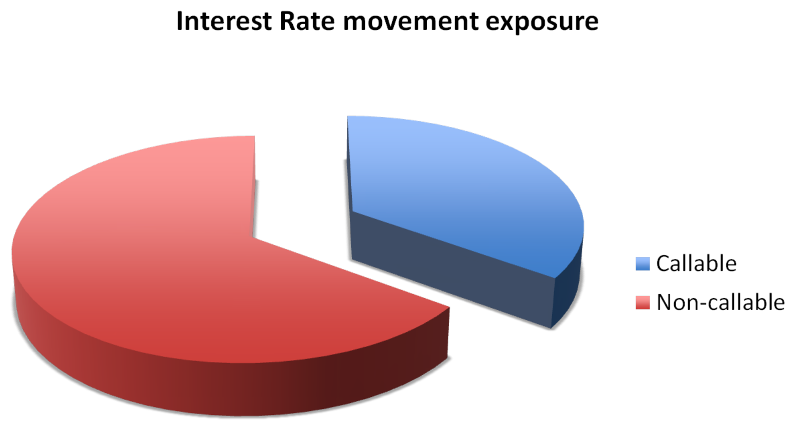
Type	Purpose	Typical Range (%)	Your Bank
US Treasuries	Liquidity		
US Agencies	Liquidity/Yield		
Municipal Bonds	Community Development/Yield		
MBS's & CMO's	Loan Substitute/Yield		
Corporate Bonds	Loan Substitute/Yield		
Other			

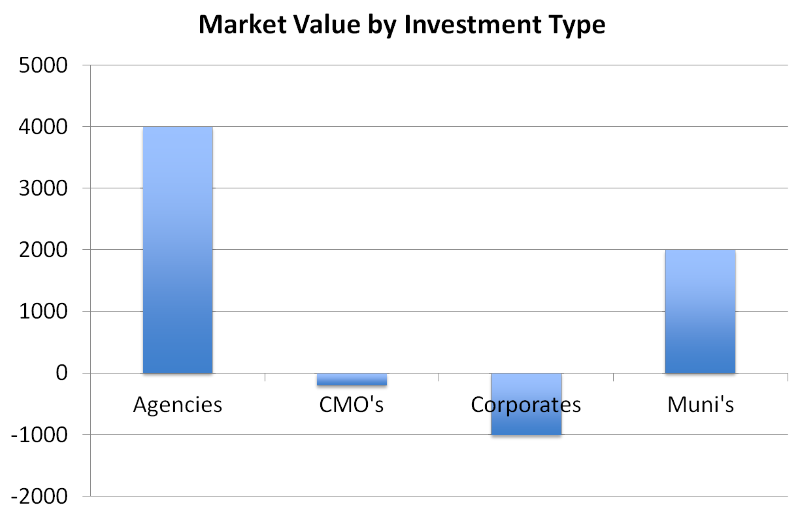
Sample Investment Portfolio Reports

Assets	Book	Market	Yield	AL	Mat
Agency	2,100	2,115	4.56%	2.5	2.5
MBS	300	290	3.95%	2.5	3.1
Muni – bond	50	50	5.95%		4.0
Corporate					
Totals:	2,450	2,455	4.36%	2.5	









Session 3 – Banking Lines of Business & Bank Management

Next steps…

- Review our Current Bank Environment

- Retail Management

- Lending Portfolio Management

- Asset/Liability Management

Future in Banking

The time to focus on fundamentals is now!

- ______________ Quality
- Know your ________________
- Net Interest __________________
- Operating _________________
- Focus on the P_______________ P________________ (Human Capital)
- Customer _____________________

Closing Thoughts

- Continue your education
- Continue networking
- Be intentional about bringing something back to your bank or to ask "how" we do this
- Get involved in your community/industry
- Admit when you have made a mistake or need help
- Be a good team player
- Always be humble and kind

Thank you!

If I can be of further assistance don't hesitate to contact me:

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