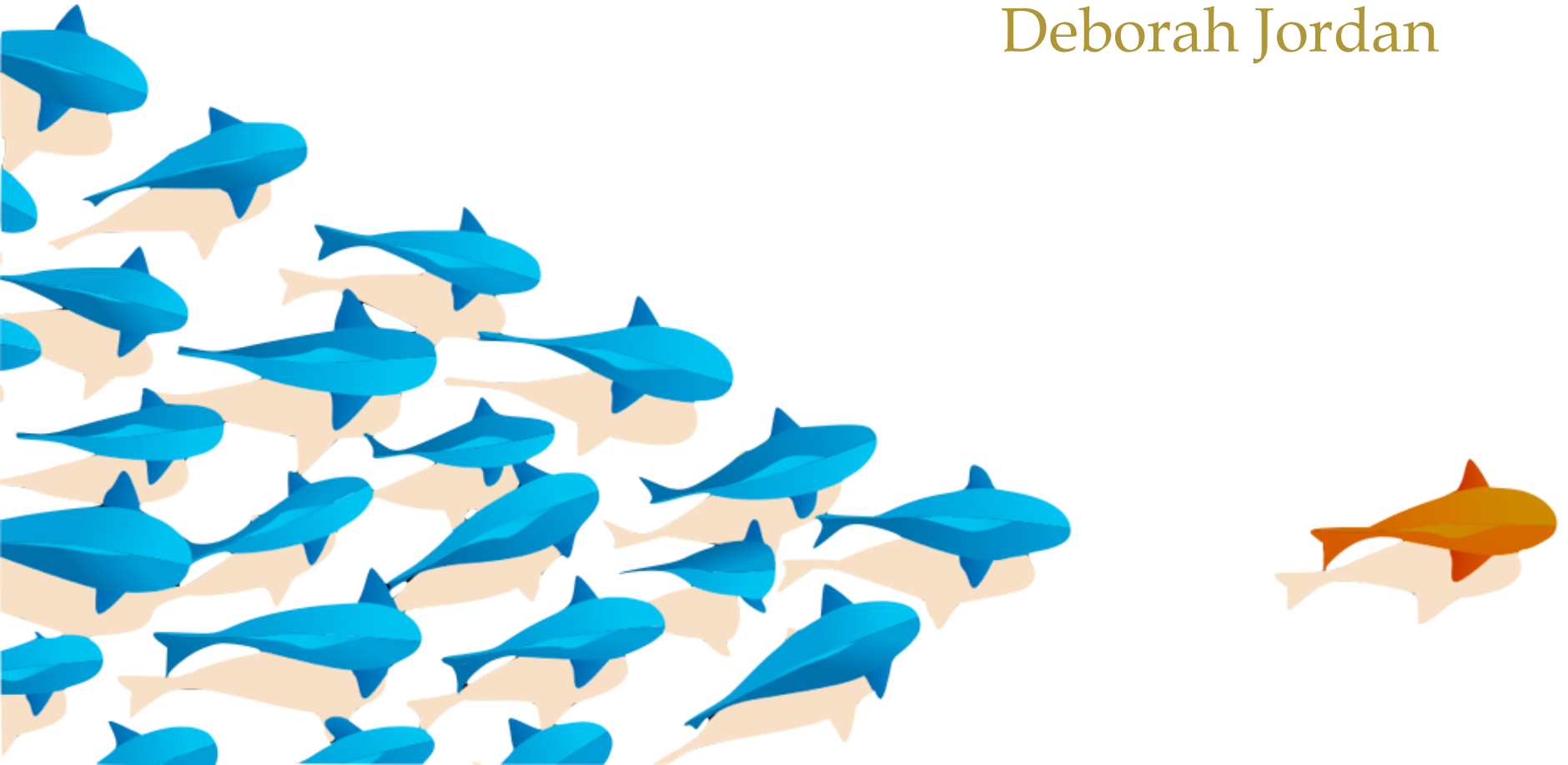


Emerging Leaders Conference

Asset Liability Management
Deborah Jordan



Outline

- Banking Basics
- Objectives of Asset/Liability Management
- Balance of Risk/Reward
- Interest Rate Risk
- Effective A/L Management Program
- Challenges for 2012 and Beyond

What is the Business of a Bank?

Manufacturing Profit/Loss

REVENUES: *Products Sold*

LESS: *Cost Of Goods*

GROSS PROFIT MARGIN

Are a Bank's Products:

ASSETS? (*Loans/Investments*)

LIABILITIES? (*Savings, NOW, CDs, etc.*)

Both Assets & Liabilities?

Bank Profit/Loss

REVENUES: *Loans & Investments*

LESS: *Cost of Funds*

NET INTEREST INCOME

Bank Income Statement

	Interest Income	
-	<u>Interest Expense</u>	
	<u>Net Interest Income</u>	→
-	Loan Loss Provision	
+	Other Income	
-	<u>Operating Expense</u>	
	Net Income Before Taxes	
-	<u>Taxes</u>	
	Net Income	→

Asset/Liability
Management:
Primary Focus

Return on
Equity Focus

A/L Management Objectives

To optimize net interest income while managing liquidity, interest rate and capital risks within Board established guidelines.

Key Challenge: Balance Risk/Return

	MAXIMUM RISK	MANAGED RISK	MINIMAL RISK
CAPITAL	<i>Low</i>	<i>Managed</i>	<i>High</i>
GROWTH	<i>High</i>	<i>Managed</i>	<i>Low</i>
CREDIT RISK	<i>High</i>	<i>Managed</i>	<i>Low</i>
LIQUIDITY	<i>Low</i>	<i>Managed</i>	<i>High</i>
INT. RATE RISK	<i>High</i>	<i>Managed</i>	<i>Low</i>

Interest Rate Risk

The exposure of earnings and capital to changes in interest rates.

Interest Rate Risk

Four types

- Mismatch/Repricing Risk
- Basis Risk
- Option Risk
- Yield Curve Risk

Mismatch/Repricing Risk

Results from timing differences in maturing or repricing assets and liabilities

	<i>Amount</i>	<i>Term</i>	<i>Rate</i>	<u><i>Three Year NII</i></u>
Scenario 1				
Loan	\$10,000	3 Years	7.25% - fixed for 3 years	\$ 2,175
CD	\$10,000	3 Years	2.71% - fixed for 3 years	\$ (813)
				<u>NII \$ 1,362</u>
Scenario 2				
Loan	\$10,000	3 Years	Prime rate - 7.25%, 3.25%, 3.25%	\$ 1,375
CD	\$10,000	3 Years	2.71% - fixed for 3 years	\$ (813)
				<u>NII \$ 562</u>
Mismatch/Repricing Risk Impact				\$ (800)

Basis Risk

Results from changes in rate relationships with same maturity or repricing interval

	<i>Amount</i>	<i>Term</i>	<i>Rate</i>	<u><i>Three Year NII</i></u>
Scenario 1				
Loan	\$10,000	3 Years	7.25% - prime reprice annually	\$ 2,175
Brokered CD	\$10,000	3 Years	4.60% - LIBOR reprice annually	\$ (1,380)
				<u>\$ 795</u>
Scenario 2				
Loan	\$10,000	3 Years	Prime rate - 7.25%, 3.25%, 3.25%	\$ 1,375
Brokered CD	\$10,000	3 Years	LIBOR - 4.60%, 1.00%, 0.75%	\$ (635)
				<u>\$ 740</u>
Basis Risk Impact				\$ (55)

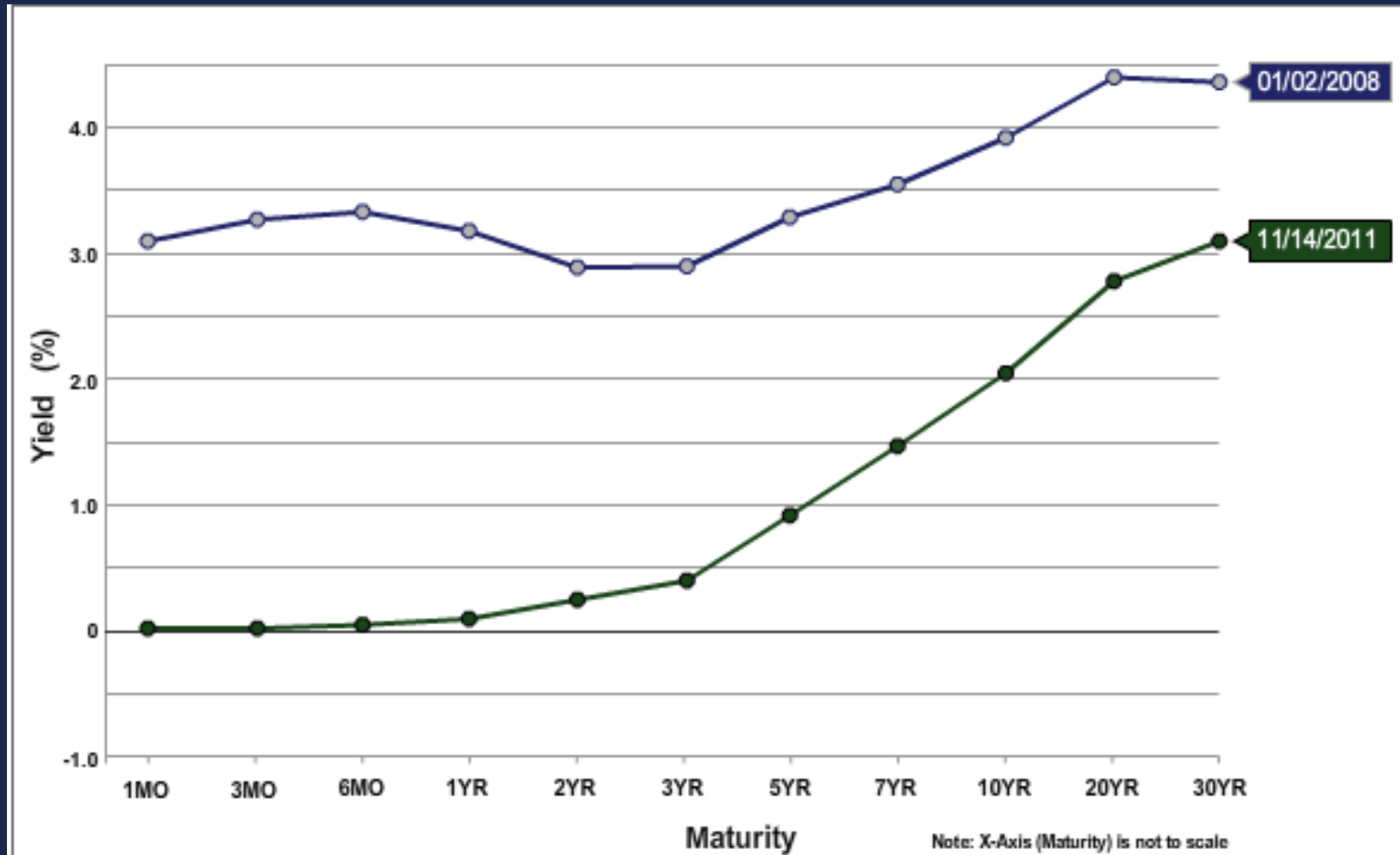
Option Risk

Results from changes in cash flows

	<i>Amount</i>	<i>Term</i>	<i>Rate</i>	<u><i>Three Year NII</i></u>
Scenario 1				
Loan	\$10,000	3 Years	7.25% - fixed for 3 years	\$ 2,175
CD	\$10,000	3 Years	2.71% - fixed for 3 years	\$ (813)
				<u>\$ 1,362</u>
Scenario 2				
Loan	\$10,000	3 Years	Prepays after 1 year, replacement loan at 3.25%	\$ 1,375
CD	\$10,000	3 Years	2.71% - fixed for 3 years	\$ (813)
				<u>\$ 562</u>
			Option Risk Impact	\$ (800)

Yield Curve Risk

Source: US Treasury

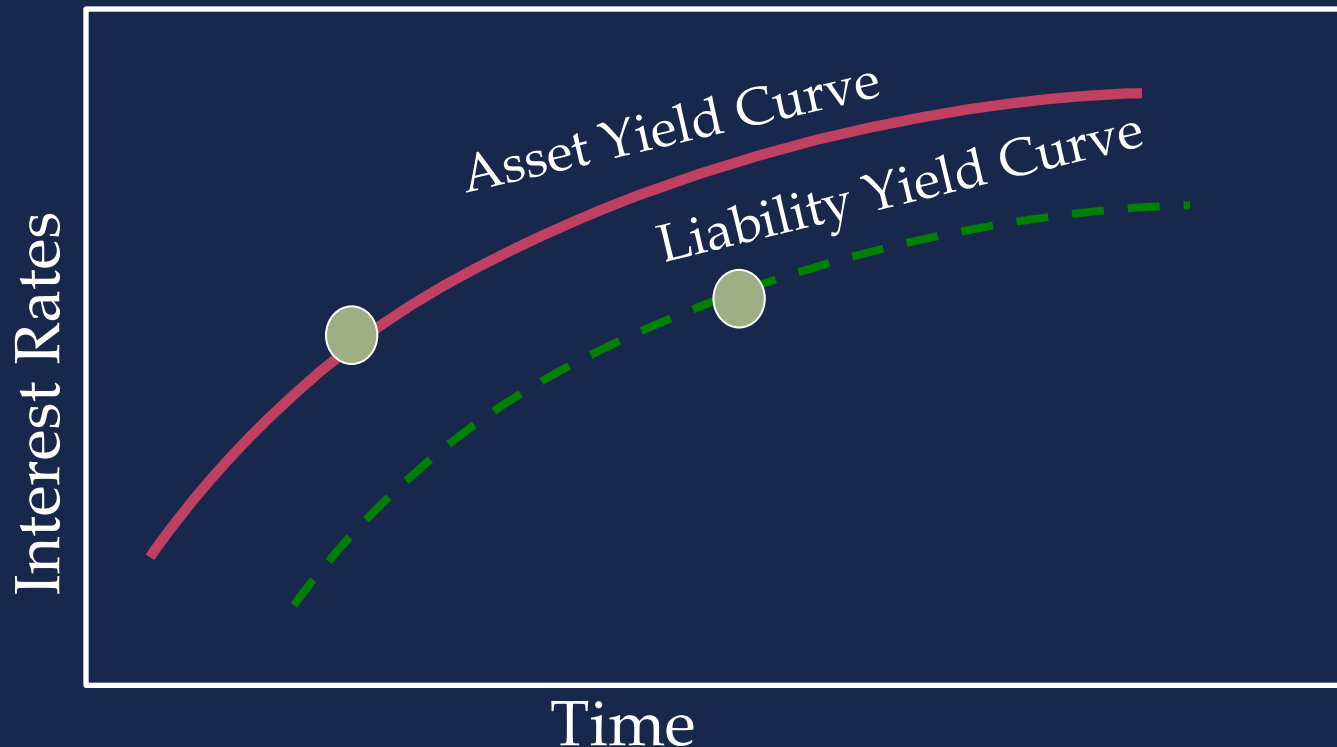


Yield Curve Risk

Results from changes in slope of yield curve

ASSET SENSITIVE

Yield Curve

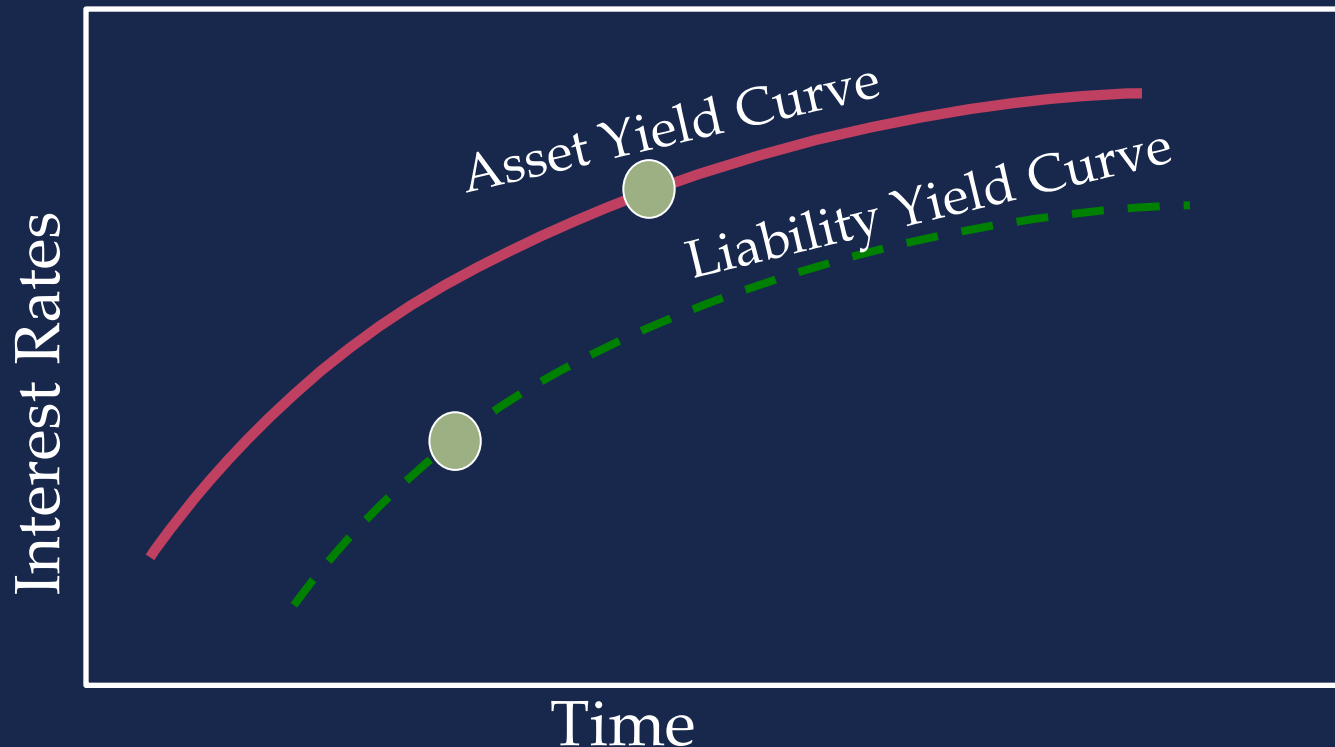


Yield Curve Risk

Results from changes in slope of yield curve

LIABILITY SENSITIVE

Yield Curve



How To Measure Interest Rate Risk

- Net Interest Income Simulations - Earnings at Risk
- Economic Value of Equity (EVE)
- Funding Matrix / Core Funding Utilization

Net Interest Income Simulation

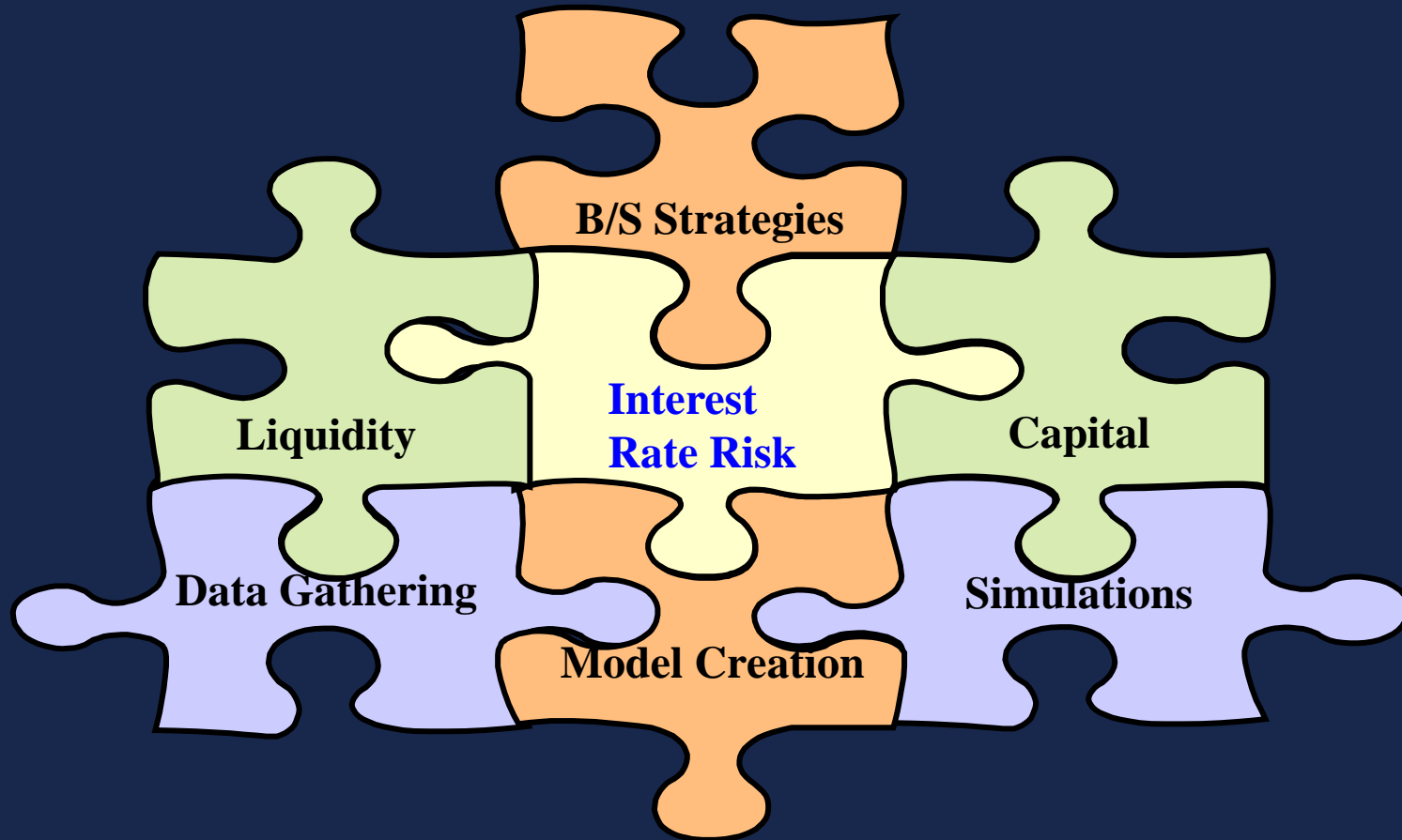
Model variables affecting Balance Sheet Performance

- Loan Maturities & Prepayments
- Investment Maturities & Cash Flows
- Deposit Early Withdrawals / Shifts
- Embedded Options (i.e. Caps / Floors)
- Loan & Deposit Pricing Assumptions
- Reinvestment / Replacement Assumptions
- Interest Rate Derivatives

Net Interest Income Simulation

- Forecasted Net Interest Income over 1, 2 and 5 Year Horizon
- Net Interest Income Sensitivity under various Interest Rate Scenarios
- Model Alternatives to Optimize NII while Mitigating Risks

Effective A/L Management

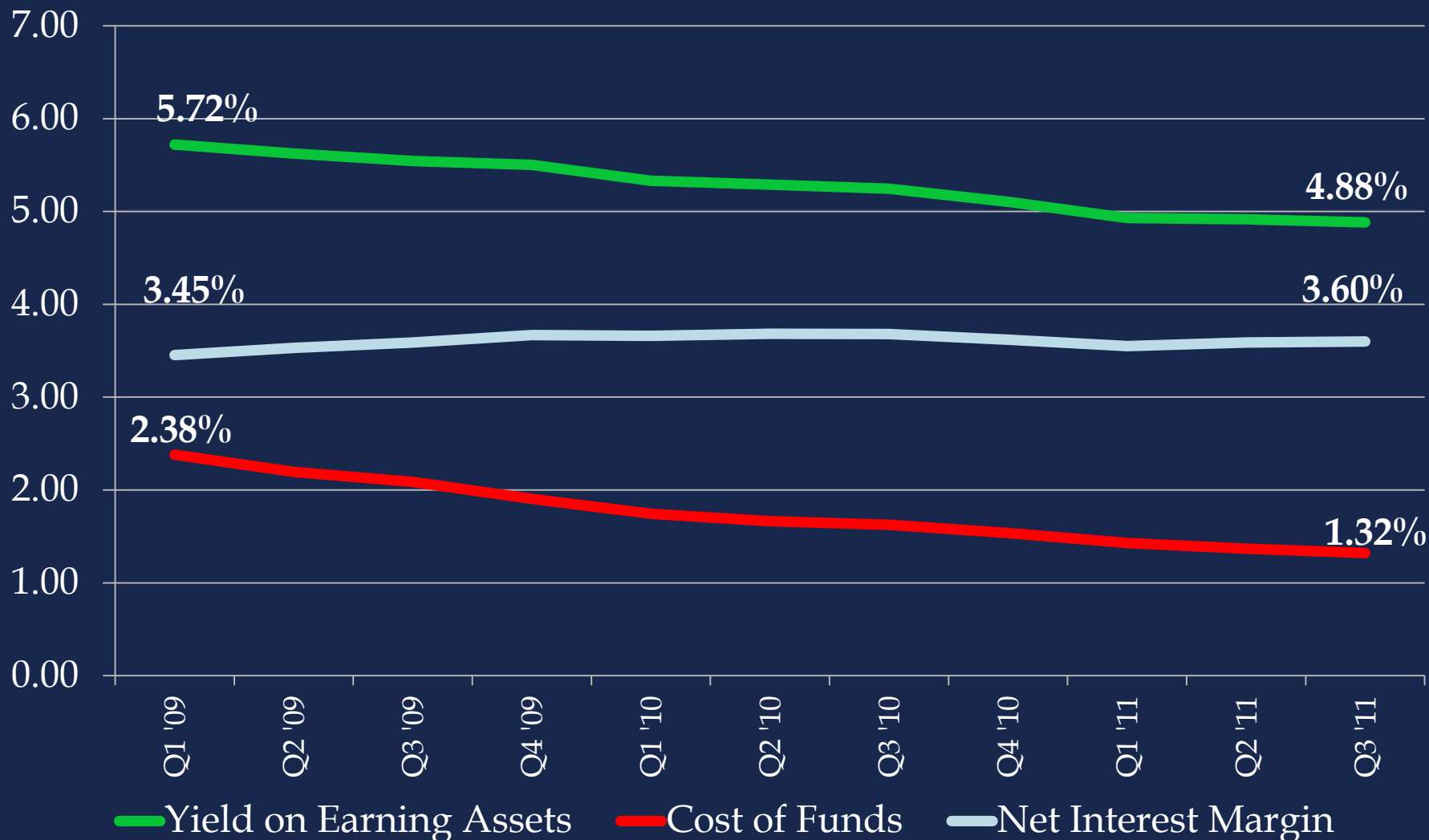


Effective A/L Management

Requires a Framework for Strategy Development & Decision Making

- Understand the Current Position: Sources of Risk
- Quantify the Net Interest Income Effect of IRR Sources
- Identify Alternatives to Mitigate Risk
- Know the Cost of Each Alternative
- Evaluate Risk/Return of Each Alternative (vs. Doing Nothing)

Maine Bank Performance



Source: SNL (Quarterly Averages for Maine Banks - Assets <\$3 Billion)

Challenges for 2012 and Beyond

- Decline in Net Interest Margin
 - Repricing Risk – Timing of Asset/Liability Repricing
 - Option Risk – Prepayments of Assets
 - Yield Curve Risk – Decline in 10 year Treasury Rate
 - Limited Ability to Lower Funding Costs
- Limited Loan Growth
- Risk/Return Decisions – Maximizing NII vs. Long-Term Interest Rate Risk
- Excess Deposits/Liquidity

ALM Panelists

- **Michael W. Bonsey**, Senior Vice President, Credit Administration – *Bar Harbor Bank & Trust*
- **M. Cheryl Brandt**, Senior Vice President, Director of Sales – *Gorham Savings Bank*
- **Richard E. Lucas**, Senior Executive Vice President, Banking – *The Bank of Maine*
- **Deborah Jordan**, Executive Vice President, Chief Financial Officer – *Camden National Bank*