# Interest Rate Risk in Today's Environment

Pennsylvania Directors College 2012



## Scope of Discussion

- Challenges in Today's Environment
- IRR Management Techniques and Board Responsibilities
- Case Studies
- Regulatory Guidance Update

Q&A...anytime



# Terminology

IRR Defined

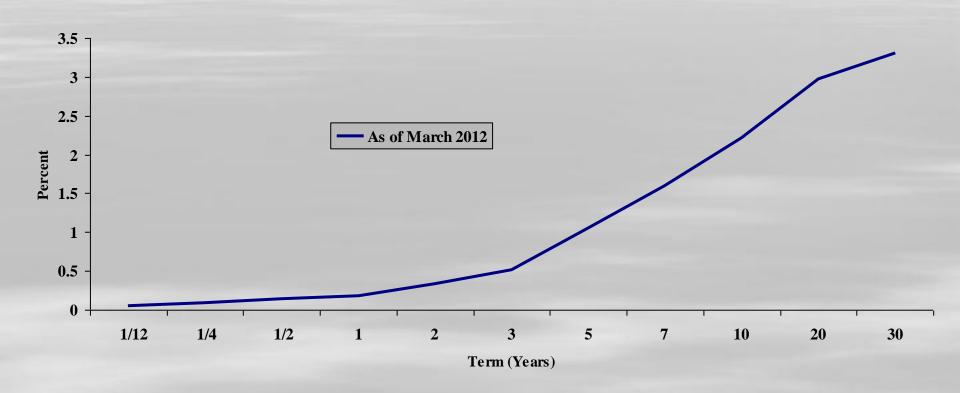
What is Asset Sensitive

What is Liability Sensitive

Long-term Assets Defined

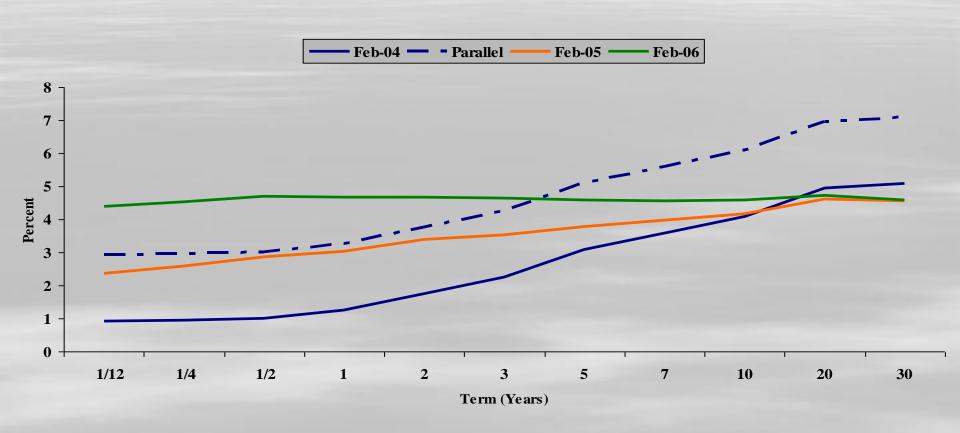


#### **Treasury Yield Curve**





#### Yield Curve Risk - Flattening





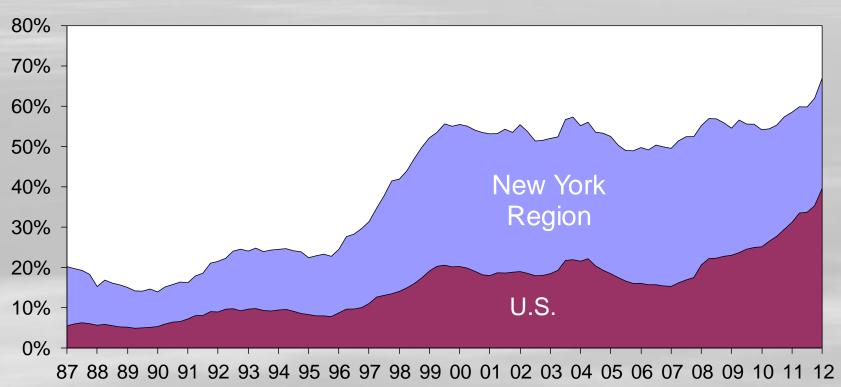
#### **Key Balance Sheet Factors**

- Long-Term Asset Concentration
- Managing Optionality on the Asset Side
- Level and Trend in Non-Maturity Deposits
- Repricing of Time Deposits
- Credit Quality Impact Margins



#### New York Region Institutions Hold Significant Levels of Long-term Assets

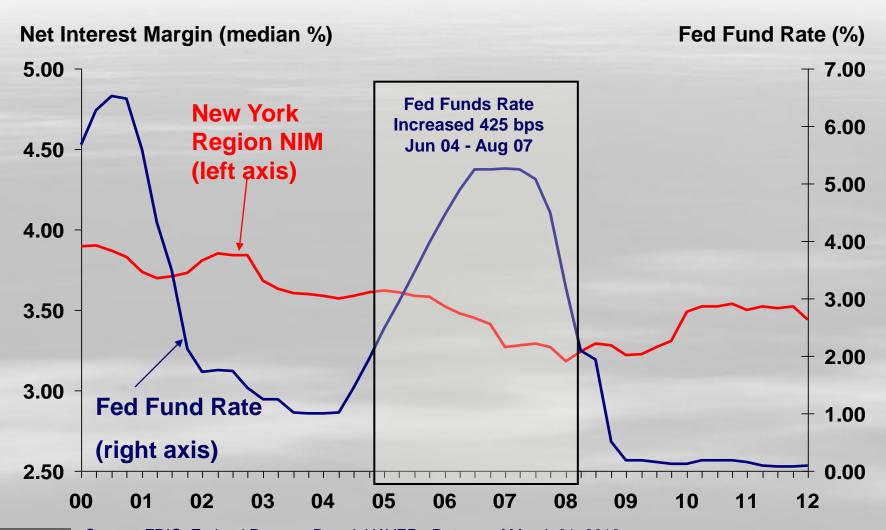
Percentage of institutions with long-term asset holdings >30%



Source: FDIC. Call Filers. Data as of March 31, 2012.

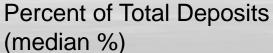


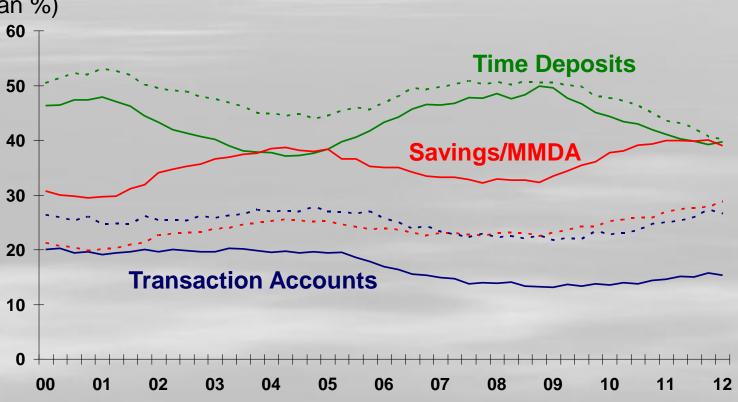
#### Historic Margin Impact





#### Time Deposits are Declining but are Still Significant



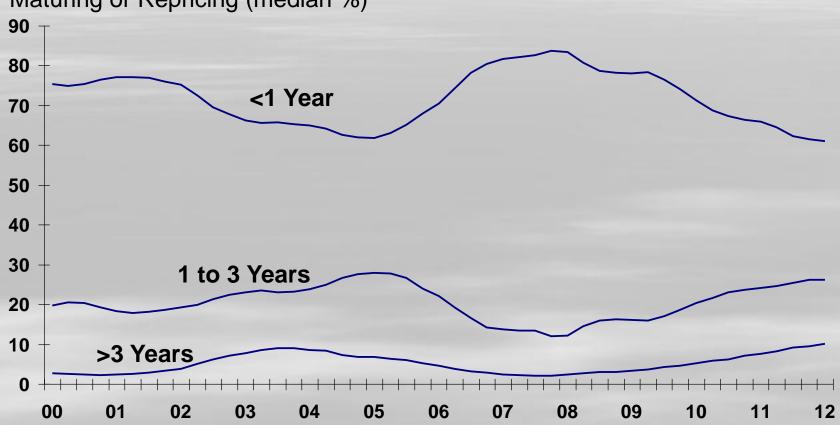


Source: FDIC. Call Filers. Data as of March 31, 2012. (New York Region is solid line, the Nation is dashed.)



#### Most Time Deposits are Short Term in the Region

Time Deposits to Total Time Deposits Maturing or Repricing (median %)



Source: FDIC. Call Filers in New York Region. Data as of March 31, 2012.



# IRR Management Techniques and Director Responsibilities



## IRR Management Responsibilities

- Prudent Oversight & Policies
- Reasonable Risk Tolerances
- Appropriate Measurement Systems
- Supportable Assumptions
- Periodic Reporting
- Adequate Independent Review
- Risk Mitigation Strategies (e.g., action plans)



# IRR Management Techniques

#### **Balance Sheet Alteration Strategies**

- Asset Sales and Purchases
- Product Mix Changes
- Product Structure Changes
- Growth

## **Hedging Strategies**



# \* 3 Critical Model Assumptions \*

These assumptions typically impact model output:

- 1. Rate Changes
- 2. Loan Prepayments
- 3. Non-maturity Deposit Assumptions

Because of their importance, ask for written assumptions



## Non-Maturity Deposit Assumptions

What is the appropriate "Beta"?

$$\frac{\text{Chg in Deposit Rate}}{\text{Chg in Market Rate}} = \frac{20\text{bp}}{100\text{bp}} = 20\%$$

- 1. How has management historically moved deposit rates in relation to interest rates?
- 2. Is this strategy changing?
- 3. What about rising vs. falling rate scenarios?
- 4. What if those assumptions were wrong?



# Sensitivity Testing Assumptions

 Rerunning your suite of scenarios while only changing one critical assumption

	Change in Net Interest Income			
	20% Deposit Beta		30% Deposit Beta	
+300 bp	85	-15%	65	-35%
Base Case	100	-	100	-
-200 bp	105	5%	105	5%



# Other IRR Management Issues

Economic Value of Equity

Core Deposit Stability (CD Withdrawals)

Modeling New Initiatives

Interest Rate Risk Limits



### **Basic Limit Test**

- Assume NIM 3.00%
- NII Limit (15%)
- NIM x NII Limit = (45) basis points
- Assume ROA 0.50%
- Results in Near Break Even ROA
- Is this Limit Appropriate?
- Not Exact, but Good Starting Point



### Case Studies

Loan Prepayment Example

Deposit Sensitivity Scenario

Basic Limit Test Example





## Additional Resources

- Remo Ficca rficca@fdic.gov
- Alan Liguori @fdic.gov

- (724) 742-1877 x8319
- (215) 591-9820 x4818

1996 IRR Joint Policy Statement

http://www.fdic.gov/regulations/laws/rules/5000-4200.html

2010 IRR Advisory

http://www.fdic.gov/news/news/press/2010/pr1002.pdf

2012 Interest Rate Risk Management: Frequently Asked Questions

http://www.fdic.gov/news/news/financial/2012/fil12002.html

