Sound Practices in Investment Portfolio and Asset-Liability Management

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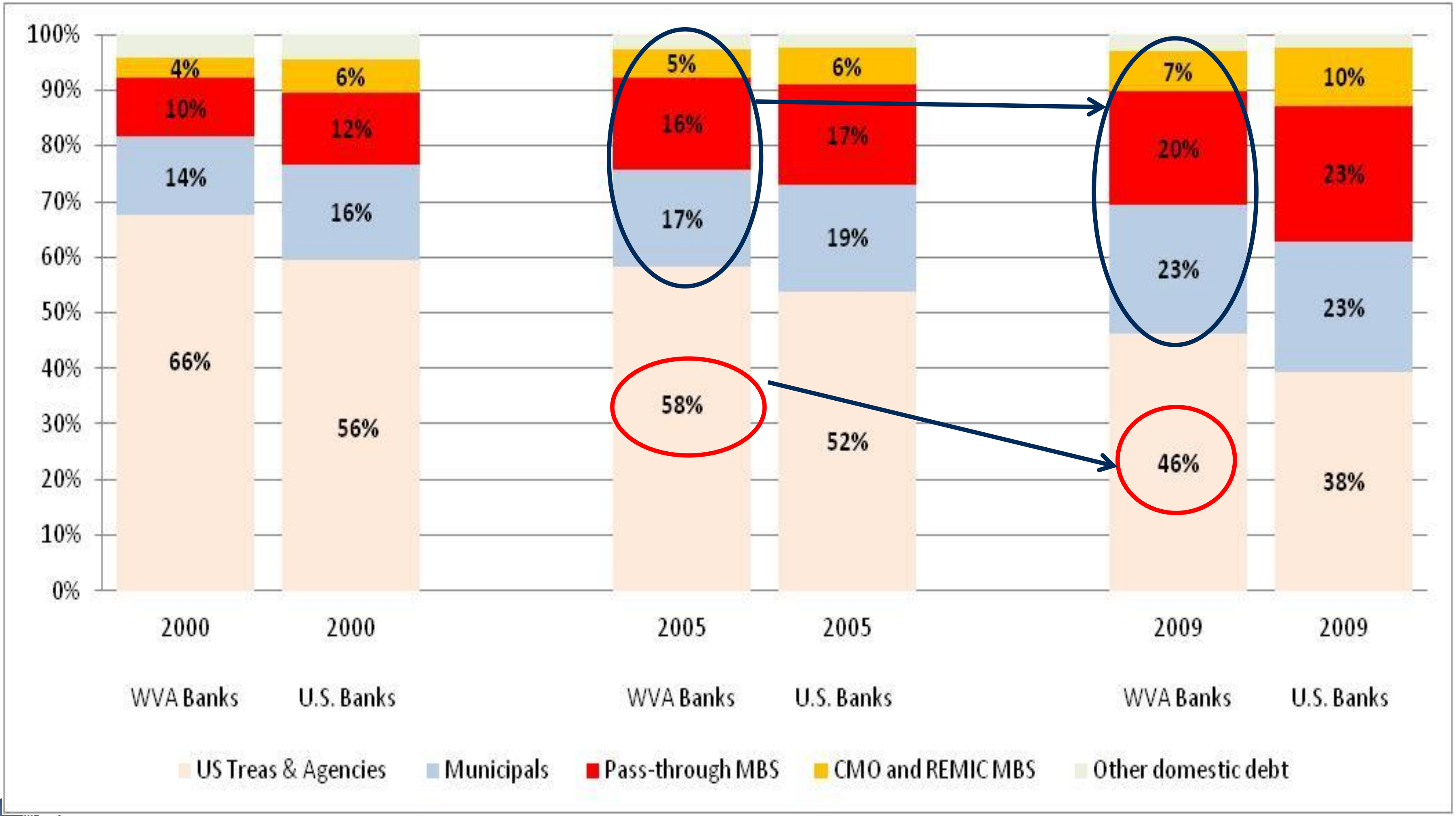
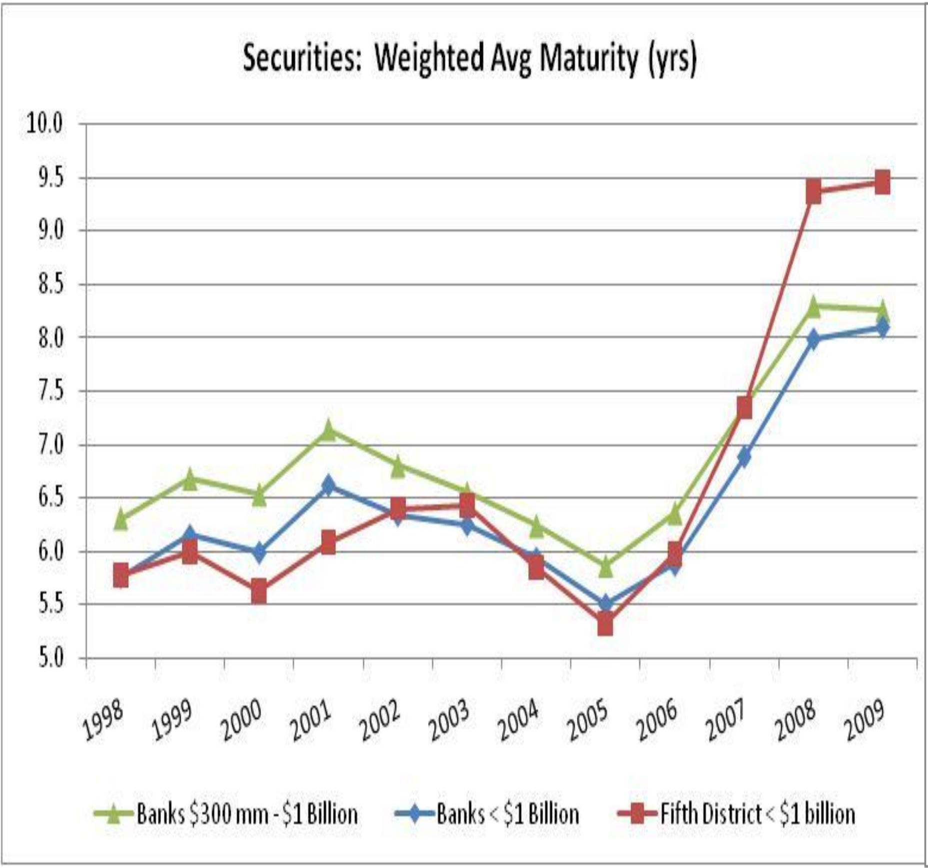
Agenda

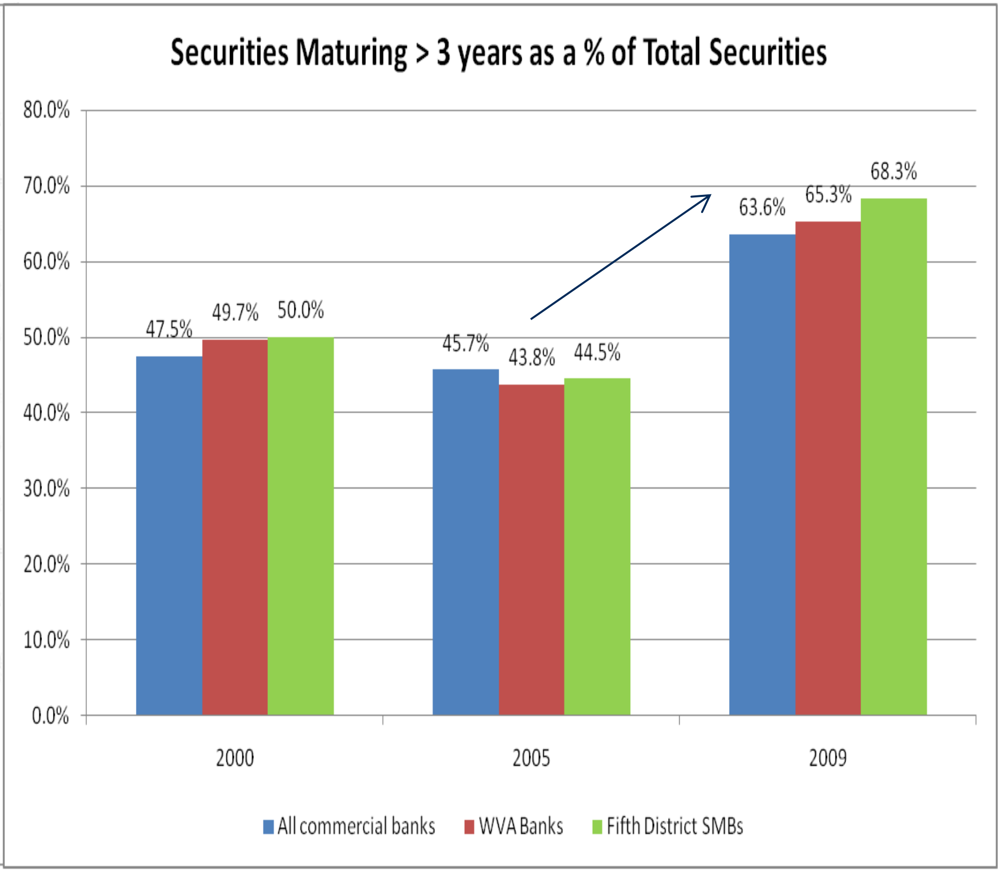
- Disclaimer
- General trends and risks in investment portfolios
- Supervisory concerns over interest rate risk
- Common IRR Findings in Examination Reports
- Sound practices for investment and asset-liability management

Shift in Composition of Investment Portfolios towards more complex products



Currently….we are seeing extending maturities and increasing holdings of longer-term securities in investment portfolios





Regulatory Concerns

- Asset quality issues continue
  - Loans are a point of significant management focus
  - Rate increase effect on borrowers who are already stretched
- Earnings and Capital considerations
  - Mismatch in the asset/liability mix could lead to margin compression
  - Potential for write-downs of carrying value of securities
  - Incentive to invest in higher risk investments for yield
- Liquidity needs
  - Declines in bond values further:
    - Limits pledgeability of portfolio as collateral for borrowings
    - Reduce the “saleability” of securities at a reasonable price
- Risk management issues
  - Balance sheet management becomes critical in this environment
  - Search for yield could lead to purchases of securities not easily modeled or understood

Common IRR Findings in Examination Reports

- Governance
  - Inadequate policies and procedures
  - Risk limits not established or not in line with the board's stated risk tolerance
  - Lack of sufficient detail in the ALCO minutes
  - Insufficient board reporting

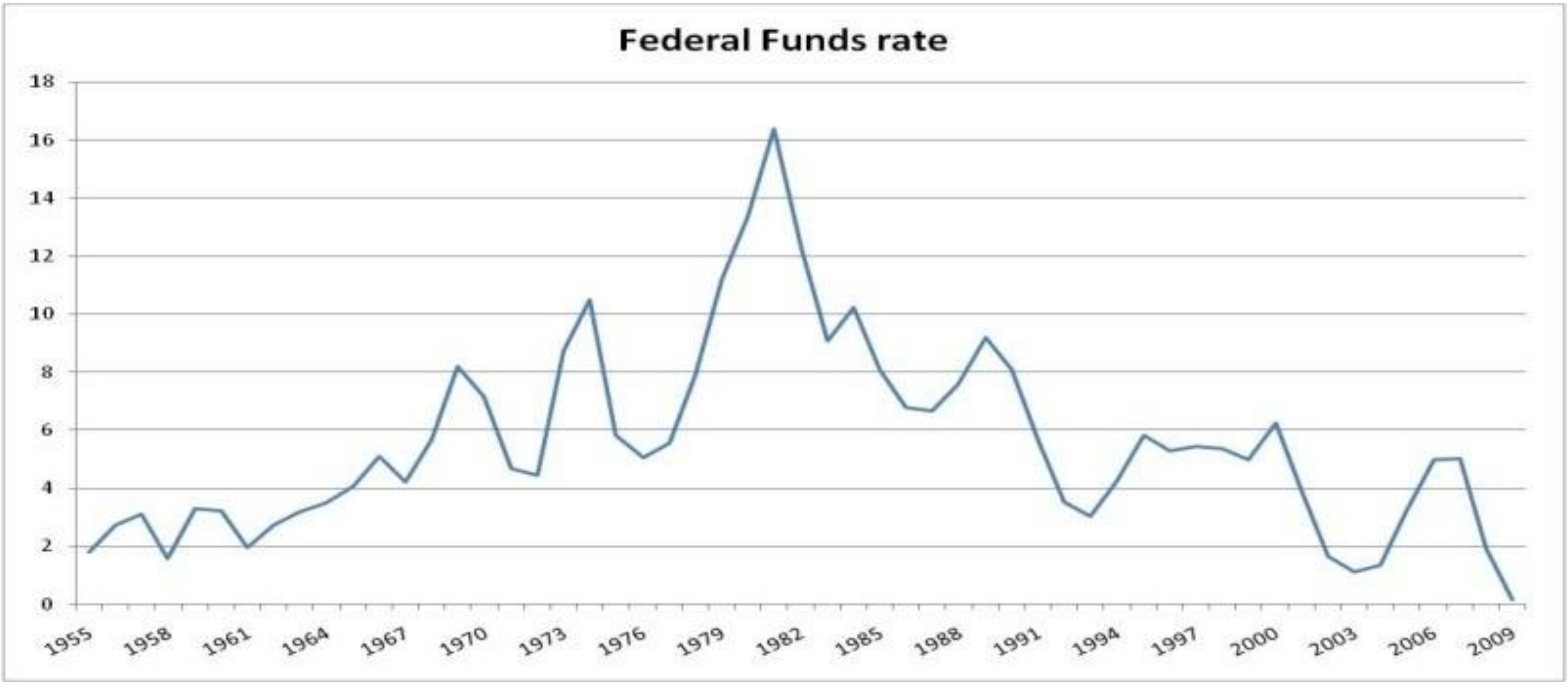
- Lack of independent review
  - Model assumptions not customized for the institution
    - Particularly nonmaturity deposit assumptions and their pricing sensitivity relative to changes in market rates
  - Model fails to capture optionality
  - Lack of annual back-testing of earnings model

Sound Interest Rate Risk (IRR) Practices

ALCO and the board need to be more proactive in:

- Establishing, monitoring, and managing risk tolerances for exposures
  - *How much earnings and capital are you willing to bet …… just for IRR*
- Evaluating adverse changes in EVE to measure long-term earnings and capital exposures
  - *Earnings models: **IRR exposures are best projected over a 2-year period***
  - *EVE gives management a way to identify potential future earnings problems down the road (opportunity cost theory)*
- **Assess IRR exposures to greater changes in magnitude (+/- 300 to 400 bps)**
- **Stress a static balance sheet (no growth)**
- **Stress scenarios should include <u>instantaneous</u> and significant changes in the level of interest rates**
- Track trend in IRR model output over time
- Build IRR model assumptions that reflect the uniqueness of the bank, market conditions, and trends
  - *Assumptions about nonmaturity deposits are key!*
  - *Independent review of model output and assumptions*

Fed Funds Rate 1955 - 2009



"…the response of interest rates across the maturity spectrum in an actual or expected tightening of monetary policy is always hard to predict, but is especially so in current circumstances." Governor Kohn speech at the FDIC Interest Rate Risk Symposium, Jan. 29, 2010

Conclusions

- Earnings and capital are under pressure
- While earnings are suffering, liquidity management needs to continue to be a focus
- Underlying credit issues could become even more pronounced as interest rates increase and consumers are further stretched
- Funding costs will not stay low forever
- Given this pressure and continued shrinking of loan portfolios, incentives to take more long-term and/or 'structure' risk may increase
- At some point, interest rates will rise and the yield curve will shift…..

The question is…….when and how much….and will changing interest rates affect your bank's earnings and capital?

APPENDIX

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Regulatory Risk Management Expectations for Structured Credit Investments (e.g., private-label mortgage backed securities, trust preferred CDOs, etc.)

- Ability to identify, measure, and manage underlying credit dynamics
- Understand the nature and performance of underlying collateral and reconcile this information with model assumptions used to provide valuations
- Understand the specific positioning of a bond in the securitization's structure
- Understand the prioritization of cash flows and loss allocation methodology (i.e., "the Waterfall")
- Ensure compliance with other than temporarily impaired (OTTI) requirements and assess the level of defaults required to suffer a loss
- Understand whether sufficient liquidity exists to retain securities to recovery
- Understand risk-based capital consequences for recourse and direct credit substitutes when external ratings deteriorate

"S" Component Ratings - Definitions

"1" indicates that market risk sensitivity is well controlled **and** that there is minimal potential that earnings performance or capital position will be affected by adverse movements in interest rates. Risk management practices are strong. Level of earnings and capital provide substantial support for the degree of market risk taken.

"2" indicates that market risk is adequately controlled **and** there is moderate potential that earnings or capital will be affected by an adverse movement in rates. Risk management practices are satisfactory. The level of earnings and capital provide adequate support for the degree of market risk taken.

"3" indicates that control of market risk sensitivity needs improvement **or** that there is significant potential that earnings or capital will be affected by adverse movements in interest rates. Risk management practices need improvement. The level of earnings and capital may not adequately support the degree of market risk taken.

"4" indicates that control of market risk sensitivity is unacceptable **or** that there is high potential that earnings or capital will be affected by an adverse movement in interest rates. Risk management practices are deficient. Level of earnings and capital provide inadequate support for the degree of market risk taken.

"5" indicates that control of market risk is unacceptable **or** that the level of market risk taken is an imminent threat to the institution's viability. Risk management practices are wholly inadequate.

How do we rate the "S" component in CAMELS

- Quantity/level of risk <u>and</u> quality of risk management
- Risk exposure relative to earnings and capital
- Importance of board and senior management oversight
- Comprehensive risk management process
  - Policies, procedures, and limits
  - Risk identification, measurement, and reporting
  - MIS reporting
  - Internal controls

Sound Investment Policies

- Objective
- Investment authority and limitations
- List of approved brokers
- Maturity limitations
- Diversification guidelines
- Quality of investments
  - Credit standards
  - Volatility
- Exception procedures
- Reporting requirements
- OTTI process

Sound Interest Rate Risk Policies

- Purpose – *i.e., "maintain consistent earnings or capital…..independent of rate movements"*
- Measurements of Risk
  - Earnings at risk (net interest income simulations)
  - Economic value of equity
- Policy limits on risk
- Policy exceptions and correcting deficiencies
- Information and communication
  - Description of reports to management, ALCO, board, etc.
- Delegation of responsibility and authority
- Description and responsibilities of governance committees (e.g., ALCO)
- Management oversight and control

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