
Interest Rate Risk and Dodd Frank changes relating to Investment Securities

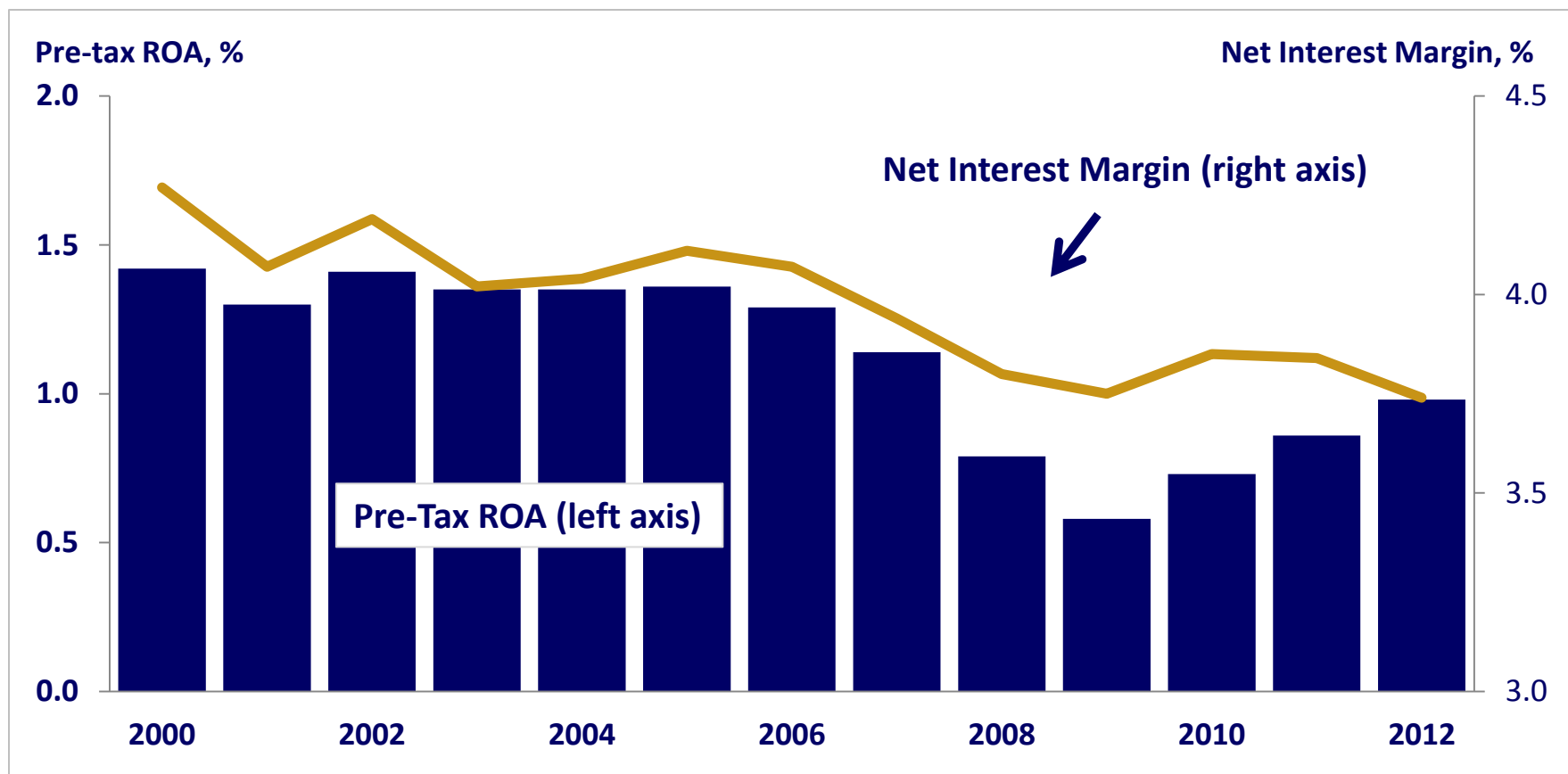


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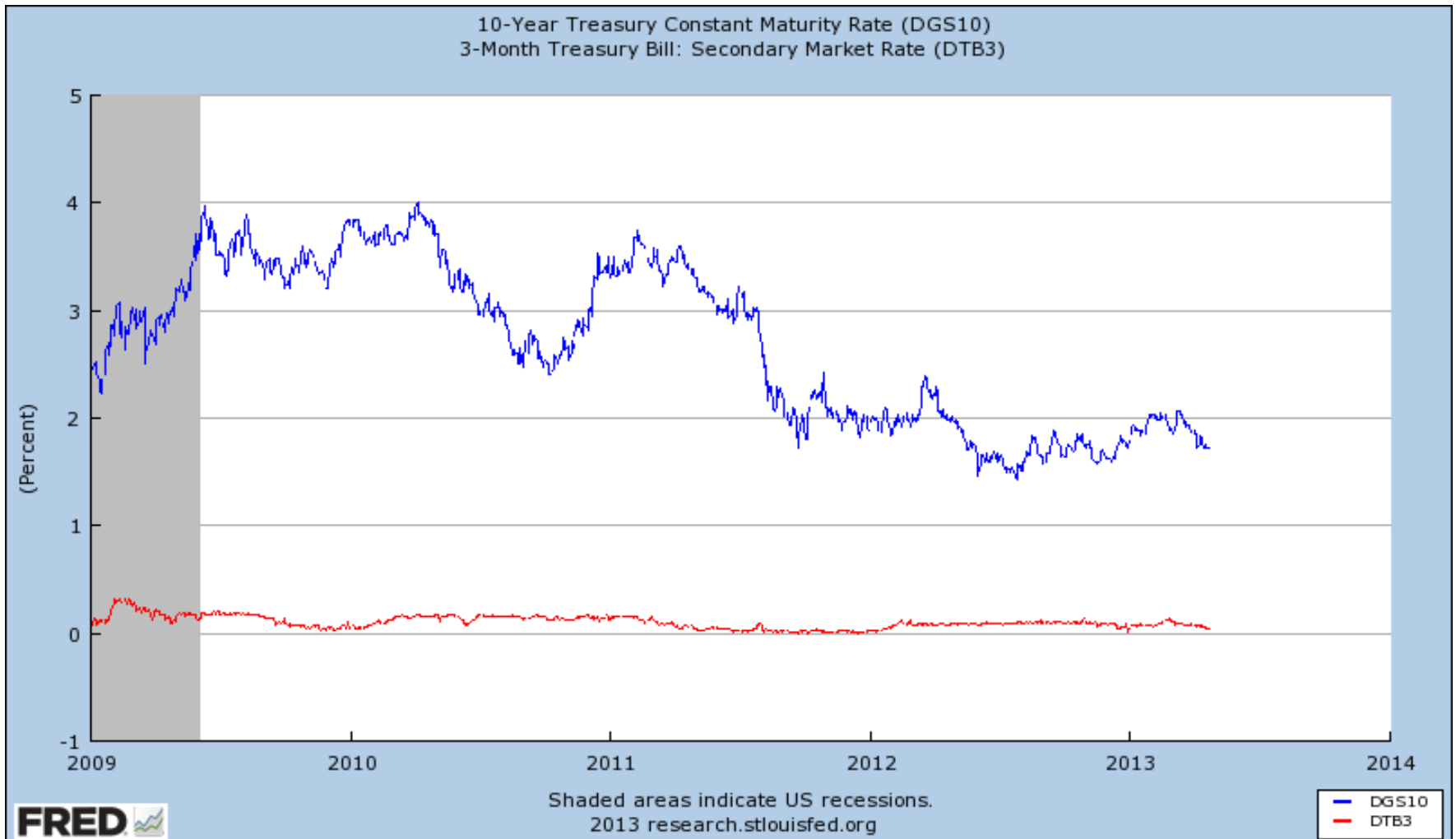
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Earnings Have Begun to Recover, but Lower Margins Continue to Hamper Performance



Source: Call / TFR Reports. Based on median figures of all institutions under \$1B in assets

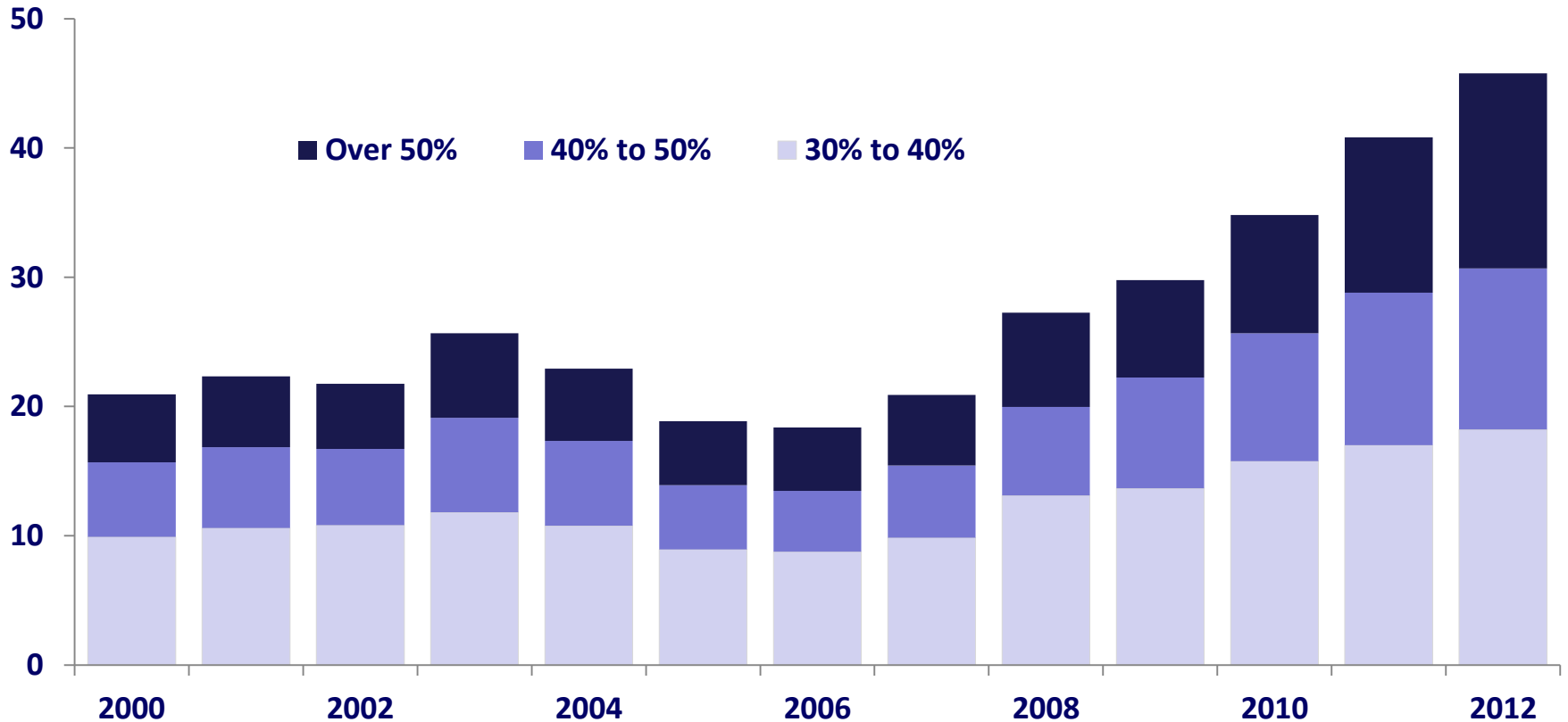
3 Month / 10 Year U.S. Treasury Spreads



Long-term Exposure

Long-term Earning Assets* to Total Earning Assets %

% of Community Banks

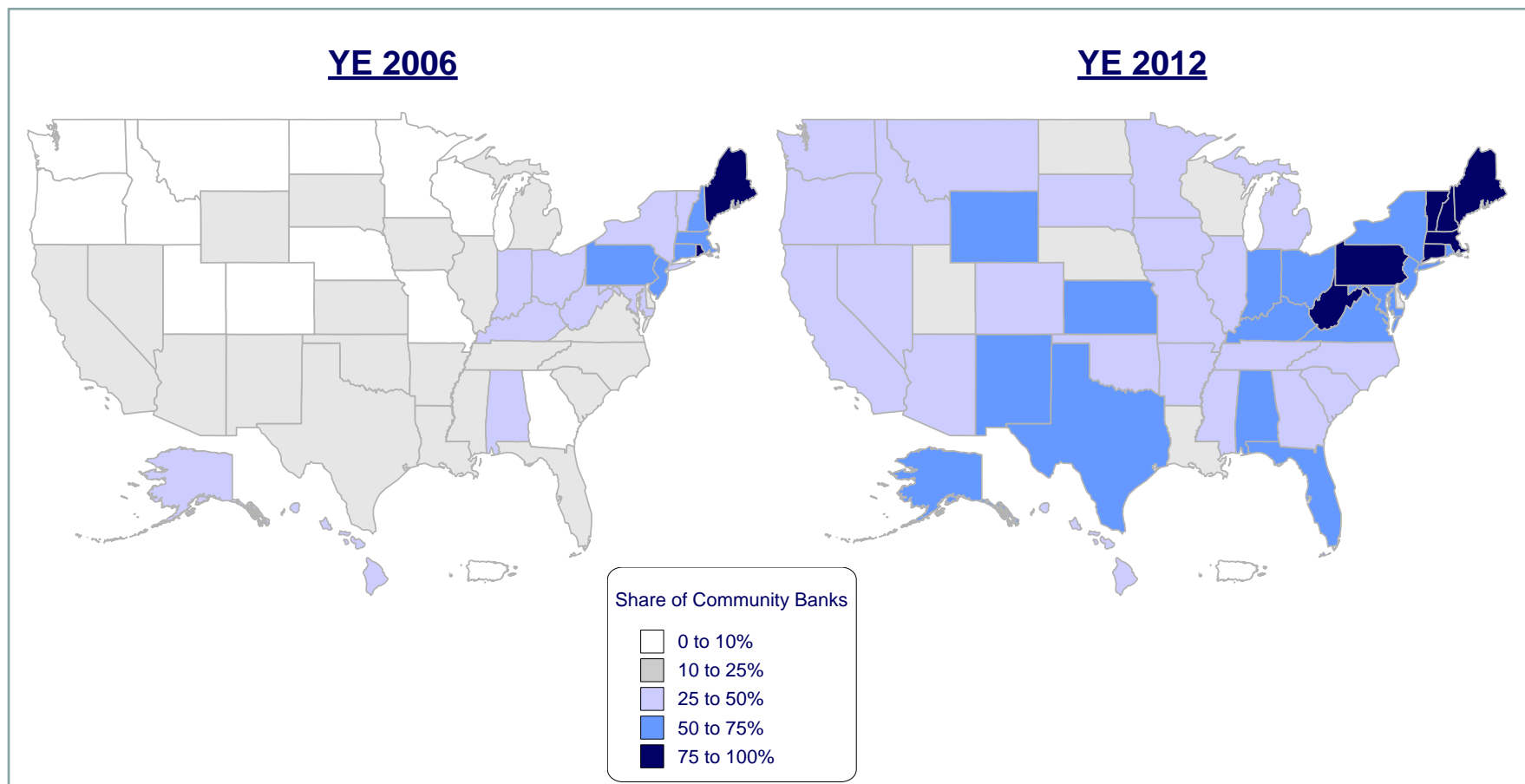


Source: Call Reports. Based on median figures of Call filers under \$1B in assets

*Earning assets maturing/repricing > 5 years – Excludes Former OTS Supervised

Increasing Exposure to Long-term Assets is Being Observed Across the Nation

Share of Banks with Long-Term Assets
Representing 30% or More of Earning Assets

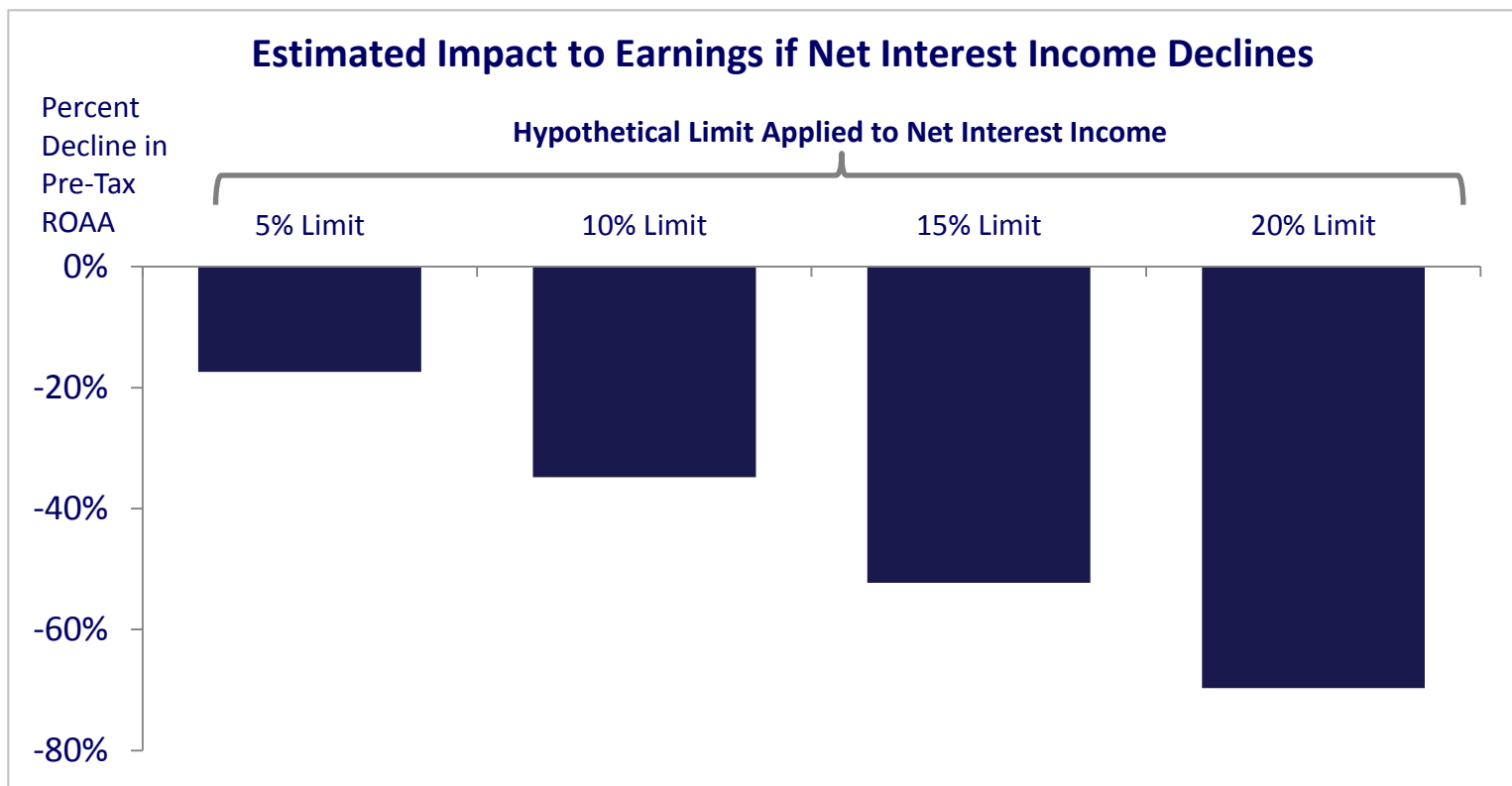


Source: Call Reports. Based on consistent sample of active Call Filers as of 4Q12 with assets <\$1B.
Excludes any former TFR filers. Based on median figures

Can you answer this question?

- What is your bank's ROA if it hits the interest rate risk limit?
- And would the board, senior management, shareholders, and regulators all be happy operating at that level of earnings?

Risk Limits: Consider the Bottom Line



- Consider impact of net interest income declines on net income
- Consider impact of non-interest income or off-balance sheet items on net income and establish net income limits

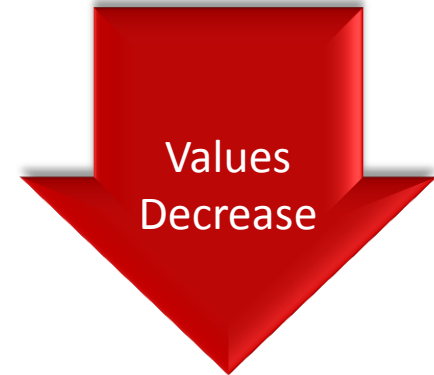
Hypothetical impact to 4Q12 median pre-tax ROAA (0.98%) for insured institutions under \$1B in assets. Based on applying simple haircut to net interest income, holding all other income drivers constant.

What is Economic Value of Equity?

- Present Value (Assets) – Present Value (Liabilities) = EVE
- Considers the difference between book yield and the market yield

Loan
Rate 5%

Certificate of Deposit
Rate 1%



Why Use EVE?

•Bank A

- Asset
- \$1,000 3yr Fixed Rate Asset @4%

- Liability
- \$900 3 yr CD @2%

- NIM 2.2%**

•Bank B

- Asset
- \$1,000 30yr Fixed Rate @5%

- Liability
- \$900 3yr CD @2%

- NIM 3.2%**

1yr Income Simulation +300bp

•Bank A

- Asset
- \$1,000 3yr Fixed @4%
- Liability
- \$900 3 yr CD @2%

•	<u>Inc</u>	<u>Exp</u>	<u>NII</u>
•Base	40	18	22
•+300	40	18	22
•Chg			0%

•Bank B

- Asset
- \$1,000 30yr Fixed @5%
- Liability
- \$900 3yr CD @2%

•	<u>Inc</u>	<u>Exp</u>	<u>NII</u>
•Base	50	18	32
•+300	50	18	32
•Chg			0%

EVE +300bp

•Bank A

- Asset
- \$1,000 3yr Fixed @4%
- Liability
- \$900 3 yr CD @2%

	<u>PVA</u>	<u>PVL</u>	
<u>EVE</u>			
•Base	979	901	78
•+300	932	828	104
•Chg			+33%

•Bank B

- Asset
- \$1,000 30yr Fixed @5%
- Liability
- \$900 3yr CD @2%

	<u>PVA</u>	<u>PVL</u>	
<u>EVE</u>			
•Base	1,100	901	199
•+300	843	828	15
•Chg			-93%

What is Sensitivity Analysis?

- Deposit assumptions represent the most material assumption for most community banks.
- What will be the impact to earnings and EVE if future deposit behavior is different than predicted?

Deposit Assumptions

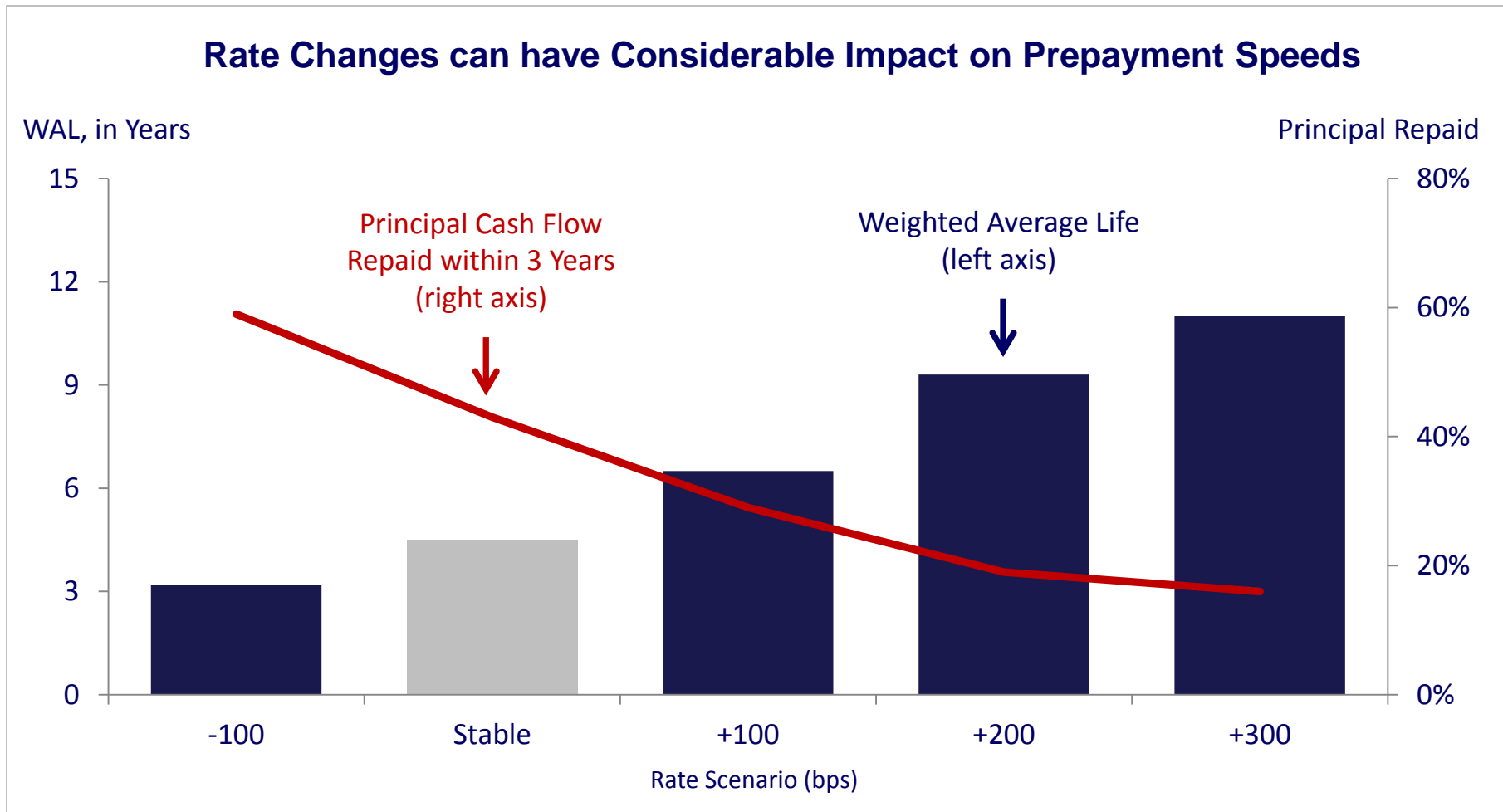
Price
Sensitivity
(Beta)

Decay Rate

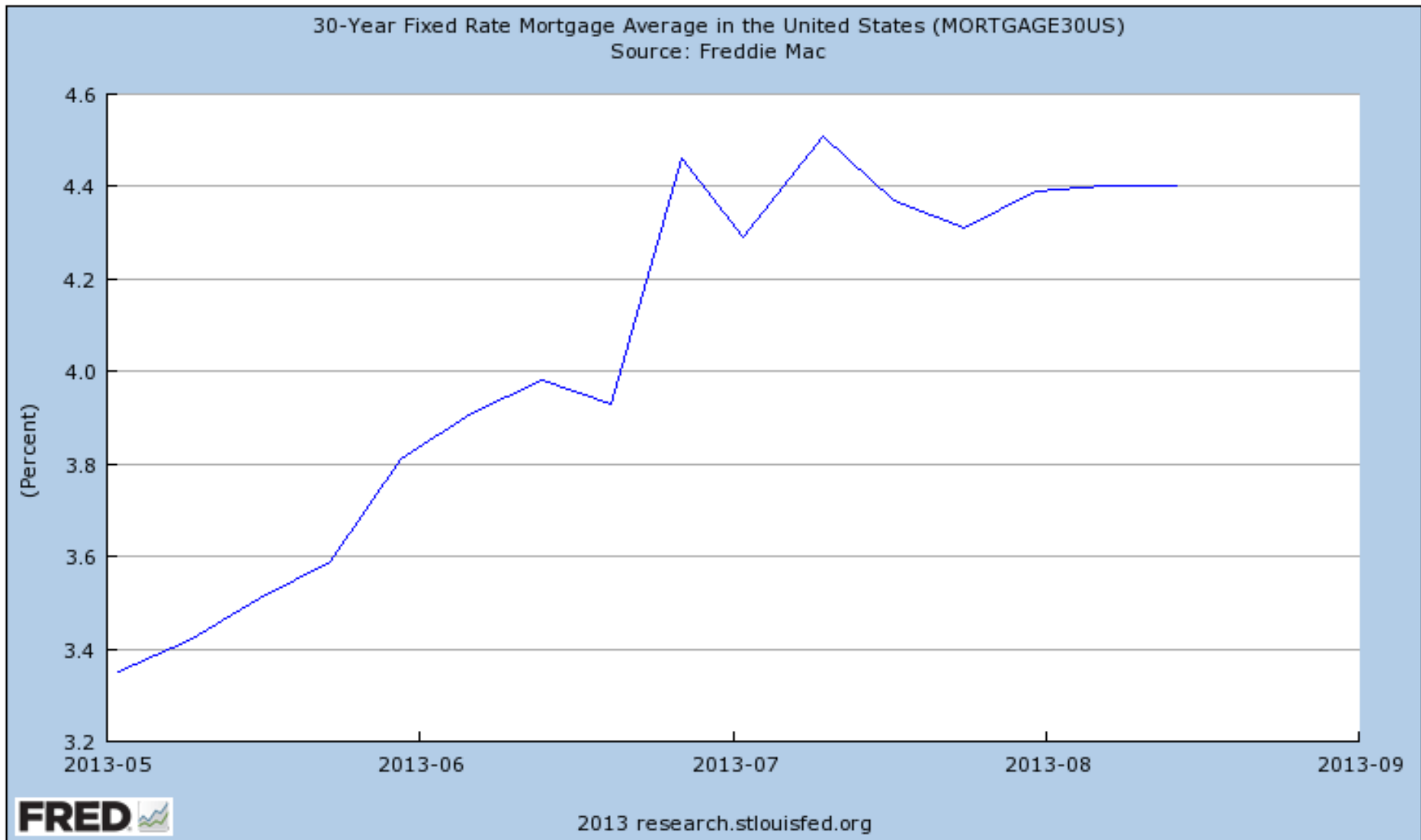
Average Life

Prepayment Speeds

Rate Changes can have Considerable Impact on Prepayment Speeds



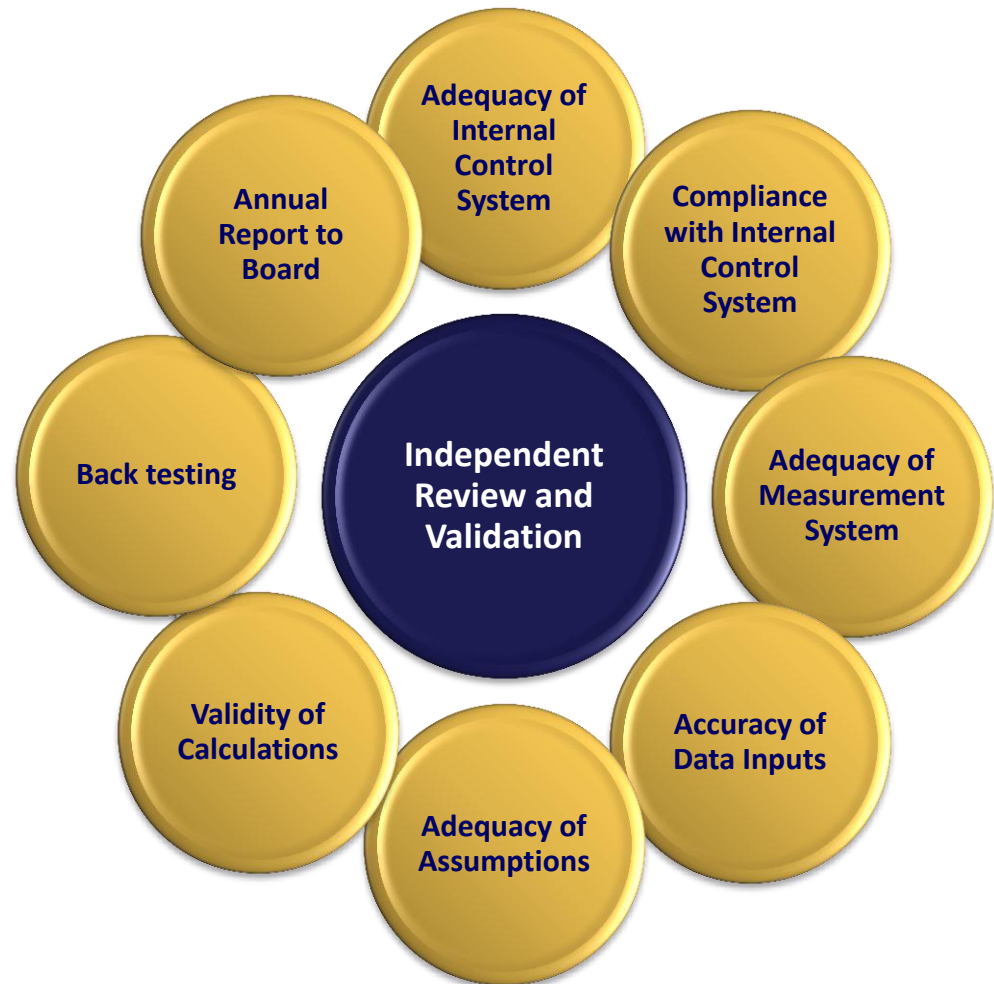
Recent Spike in Mortgage Rates – What Impact on Prepayments and Duration?



Internal Control and Review

Internal Control System:

- Roles, Responsibilities, and Lines of Authority
- Separation of Duties
- Adequacy of System Inputs & Measurement Systems
- Policy Compliance
- Corrective Action Procedures



Questions to Ponder

- Problematic rate scenarios. Do you have yield curve risk? Option risk? Can you measure it?
- Key assumptions. What are they? Do you do sensitivity analysis?
- New products? How are they modeled?
- Do you have “surge balances”? And how are they modeled?
- Mitigation strategies. How do you manage IRR?
- Results reliability. Is your model giving you reliable information you can use to manage the bank?

Resources

- Outstanding Guidance
 - Joint Agency Policy Statement on Interest Rate Risk (FIL-52-96)
 - Advisory on Interest Rate Risk Management (FIL-2-2010)
 - Interagency Advisory on IRR Management: Frequently Asked Questions (FIL-2-2012)
 - Managing Sensitivity to Market Risk in a Challenging Interest Rate Environment (FIL 46-2013)
- Director's Resource Center: www.fdic.gov/resourcecenter

Dodd–Frank Wall Street Reform and Consumer Protection Act (Dodd Frank)

Section 939 A and the use of Credit Ratings

Dodd Frank - 939A

- Directs Federal agencies to review any regulation that requires the use of an assessment of credit quality that includes a reference to credit ratings.
- Requires that the agencies remove any such reference to credit ratings and substitute alternative standards of creditworthiness.

12 CFR 1

- Applies to National Banks
- Indirectly Applies to FDIC Insured State Chartered Banks Through FDIC Part 362

Investment Credit Analysis

- While the credit ratings remain a valuable source of information the bank should supplement the external ratings with a degree of due diligence and additional analysis that are appropriate for the bank's risk profile and for the size and complexity of the instruments.
- A security rated in the top four rating categories by an NRSRO is not automatically deemed to satisfy the revised “investment grade” standard.

Old Investment Grade Definition

A security that is rated in one of the **four highest rating categories** by:

Two or more NRSROs; or

One NRSRO if the security has been rated by only one NRSRO.

12 CFR 1 (revised)

- Definition of Investment Grade - The issuer of a security has an **adequate capacity to meet financial commitments** under the security **for the projected life of the asset or exposure.**
- An issuer has an adequate capacity to meet financial commitments if the risk of default by the obligor is low and the full and timely repayment of principal and interest is expected.

Application of 12 CFR 1

- Type 1 Securities exempt from Investment grade definition
 - **US Direct Obligations**
 - **US Agencies**
 - **Municipal G.O. (and Revenues in a well capitalized institution)**
- Investment grade requirement primarily applies to corporate and structured securities
- However, the regulators will expect that analysis in addition to the NRSRO rating will be performed on municipal securities to satisfy safety and soundness concerns

12 CFR 1 - Determining Permissible Purchase

- Credit analysis should support that securities meet investment grade or safety and soundness standards
 - Banks may have resources to do majority of analytical work internally; or may choose to engage third parties
 - Cannot delegate decision-making and third parties should be independent, reliable, and qualified.

Guidance 12 CFR 1 - Determining Permissible Purchase

- Due diligence process should reflect the security's credit quality, complexity of structure, and size
 - More complex structures require heightened due diligence to understand the structure and performance in different default environments
 - Process may include consideration of internal analyses, third party research and analytics including external credit ratings, internal risk ratings, default statistics and other sources of information as appropriate for the particular security
 - Guidance provides a matrix. Matrix is provided as a **GUIDE** and individual purchases may require more or less analysis dependent on risk characteristics. **Key point **

Credit Risk Assessment –Key Factors

- Key Factors across all categories:
 - Confirm spread to Treasuries is consistent with bonds of similar credit quality
 - Confirm risk of default is low and consistent with bonds of similar credit quality
 - Confirm capacity to pay and assess operating and financial performance levels and trends through internal credit analysis and/or other third party analysis

Credit Risk Assessment –Key Factors

- Municipal Bonds:
 - General Obligations
 - Evaluate the soundness of a municipal's budgetary position and stability of its tax revenues. Consider the debt profile and level of unfunded liabilities, diversity of revenue sources, taxing authority and management experience
 - Understand local demographics/economics. Consider unemployment data, local employers, income indices, and home values.

Credit Risk Assessment –Key Factors (Continued)

- Municipal Bonds (Continued):
 - Revenue Bonds
 - Understand local demographics/economics. Consider unemployment data, local employers, income indices, and home values.
 - Assess the strength and source of revenue structure for municipal authorities. Consider the obligors financial condition and reserve levels, annual debt service and debt coverage ratio, credit enhancement, legal covenants, and nature of product.

Credit Risk Assessment – Structured Securities

- Some factors in analyzing Structured Securities
 - **Creditworthiness assessment for a structured securities is inherently different from one that relies on financial capacity of the issuer.**
 - **Understand features that would materially affect performance (cash flow waterfall, loss allocation rules, etc.)**
 - **Effect of economic stresses on cash flows.**
 - **External analyses are widely available – sometimes using base case and a moderate and severe stress case**
 - **A severe stress should demonstrate that risk of loss is low and full and timely repayment of P&I is expected (otherwise not investment grade)**

Effective Portfolio Management

- Policies and procedures need to be reassessed in light of the changes under Dodd Frank and the attendant changes in the definition of investment grade.
- Guidelines for effective portfolio management discussed in FIL 45-98 Interagency Supervisory Policy Statement on Investment Securities and End-User Derivative Activities as well as FDIC Manual of Examination section on Investment Securities should continued to be followed.
- An institutions investment policy has to address the pre-purchase and post purchase or process/framework under which bank will determine whether an investment security is investment grade on an initial and on going purpose.

Effective Portfolio Management

- Banks must have an appropriate risk management framework for the level of risk in the investment portfolio. Failure to maintain an adequate investment portfolio risk management process is considered unsafe and unsound.
- Board's risk tolerance should be incorporated into investment policies that are consistent with broader business strategies, capital adequacy, and technical expertise.
- Credit risk concentration limits should be established across the institution, including the investment portfolio.

Other evolving matters

- ❑ Uniform Agreement on the Classification of Assets and the Appraisal of Securities
- ❑ Possible Q&A to be issued to address the new investment guidelines

Resources

- Outstanding Guidance
 - OCC Bulletin 2012-18 Dated 6-18-12- Alternative to the use of Credit Ratings in the Regulations of the OCC (Final Rules and Guidance)
 - FIL 45-98 Dated 4-28-98 New Standards for Investment Securities and End-user Derivatives Activities
 - FDIC Supervisory Insights – Summer 2013 Credit Risk Assessment of Bank Investment Portfolios

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