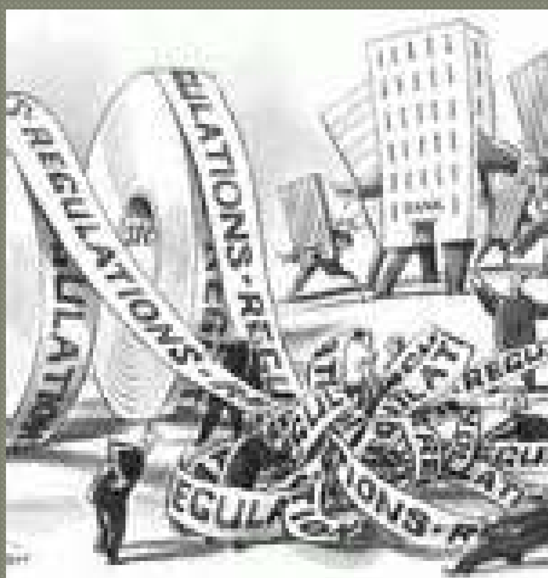
CHANGING TIMES IN BANKING
HOW THIS IMPACTS YOU



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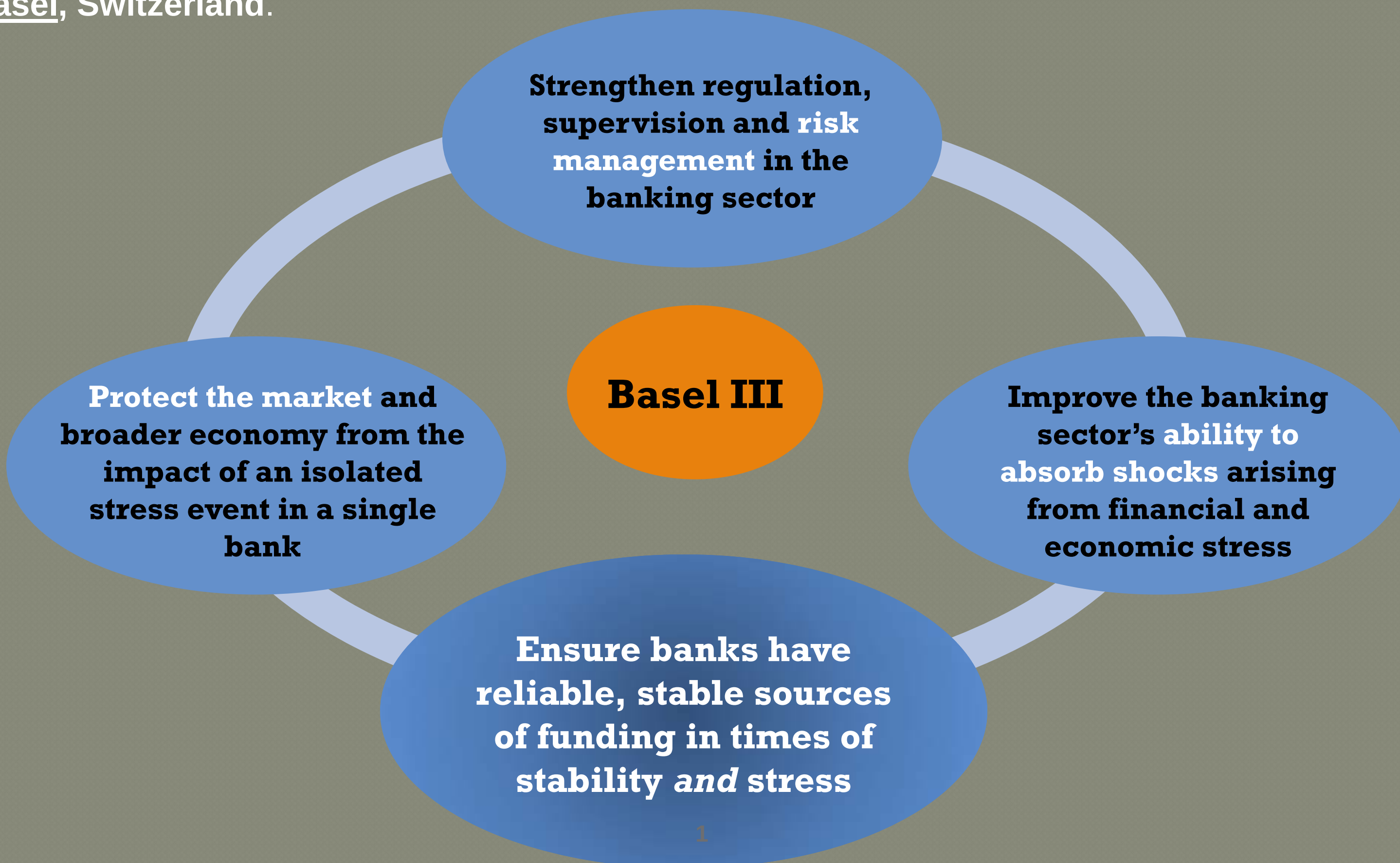
The Changing Regulatory Environment

Basel III – a comprehensive set of reforms with several goals

- Basel III was developed by the Bank for International Settlements which was established in 1930; their goal is to help central banks with monetary and financial stability. Their head office is in **Basel, Switzerland**.



US Basel III Components – Liquidity and Capital

- Basel III has redefined global standards for how banks are required to manage their balance sheet, including liquidity risk. To achieve this, the regulations put the following measures in place:

Liquidity Coverage Ratio

LCR requires banks to hold enough high quality liquid assets (HQLA) in reserve to meet all liabilities in a 30-day stress scenario.

$$\frac{\text{HQLA}}{\text{Net Cash Outflows}} \geq 100\%$$

- Incentive for banks to hold more HQLA
- HQLA includes cash, central reserves, government securities, corporate debt securities, etc.
- Potentially limits banks capacity to make loans

Net Stable Funding Ration (NSFR)

NSFR seeks to reduce a bank's funding horizon by promoting longer term funding sources

$$\frac{\text{Stable Funding}}{\text{Weighted long-term Assets}} \leq 100\%$$

- Reduces dependency on short-term wholesale funding (STWF)
- Encourages better assessment of funding risk
- Promotes funding stability
- Targets mismatches between liquidity profile of a bank's assets and liabilities

These financial measures focus on ensuring banks have <u>available, reliable funding</u> during times of stability and stress

US Basel III Components – Capital Requirements:
What is G-SIB?

Global Systemically Important Banks

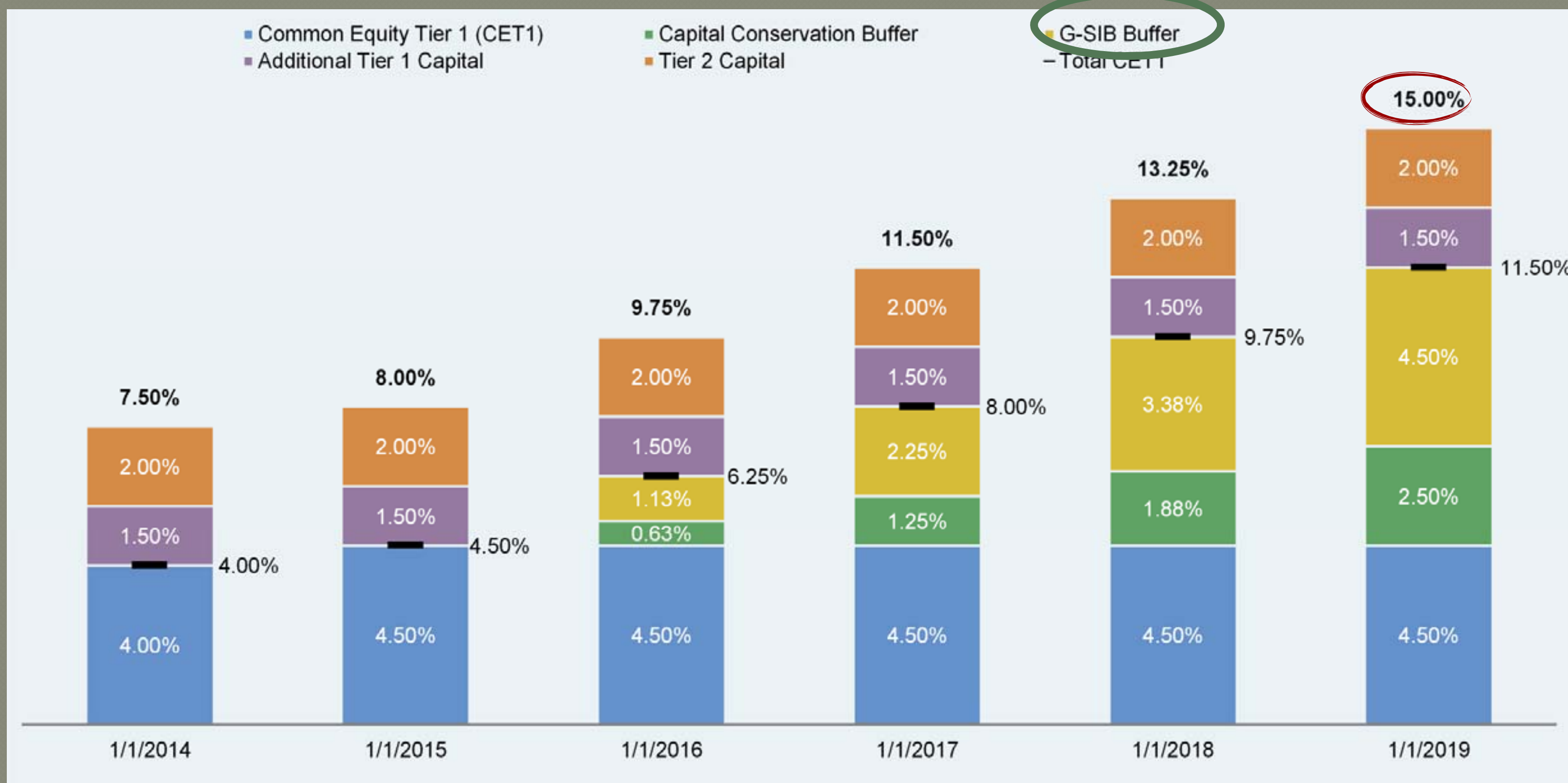
- US G-SIB guidelines announced by the Fed in December 2014; made up of 5 components
- Identified US G-SIBs are: Bank of America, Bank of New York Mellon, Citigroup, Goldman Sachs, JPMorgan Chase, Morgan Stanley, State Street, and Wells Fargo
- US G-SIB capital buffer percentage ranges from 0% to over 5.5%
- US method for G-SIB calculation varies from the Basel Committee calculation by including **Short-term Wholesale Funding (STWF)**; which adds further pressure on these banks' treatment of **non-operating deposit balances**

Size + **Inter-connectedness** + **Complexity** + **Cross-jurisdictional Activity** + **Short-Term Wholesale Funding** (<1 year)

Non-operating balances will increase the US GSIB score, which results in increased capital costs

US Basel III Components – Capital Requirements

Composition of Required Capital through transition period to 2019



Source: Board of Governors of the Federal Reserve System

US Basel III Components – Liquidity and Capital continued

- Basel III has redefined global standards for how banks are required to manage their balance sheet, including liquidity risk. To achieve this, the regulations put the following measures in place:

Supplementary Leverage Ratio – "SLR"

$$\frac{\text{Tier 1 Capital}}{\text{Total Assets (total of all on- and off-balance sheet assets)}} =$$

- A supplemental **3%* non-risk based leverage ratio** which serves as the backdrop to LCR and NSFR
  - *> **6% for 8 biggest** US Banks: Bank of America, Bank of New York Mellon, Citigroup, Goldman Sachs, JPMorgan Chase, Morgan Stanley, State Street, and Wells Fargo

Total Loss Absorbing Capital – "TLAC"

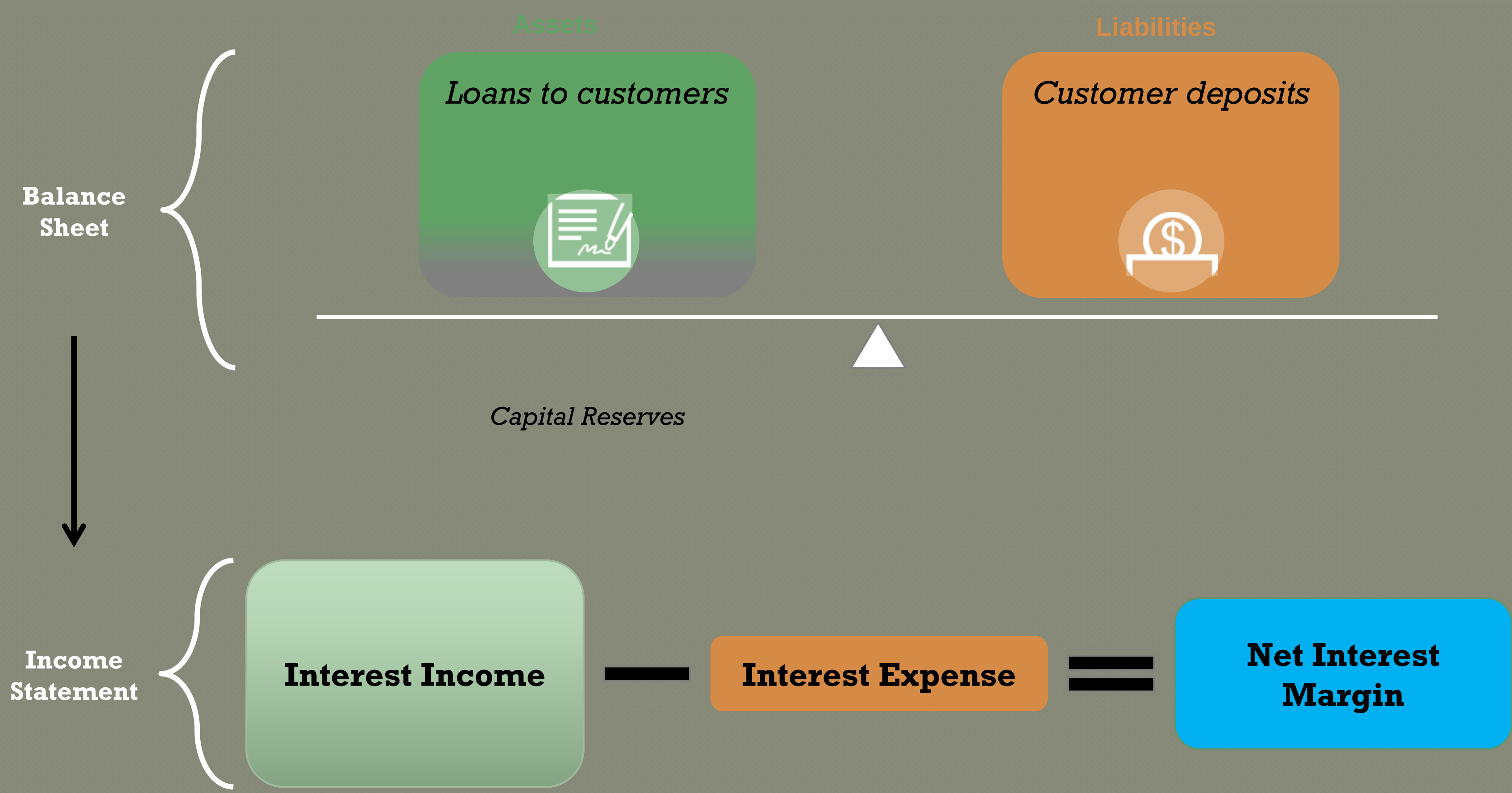
Minimum Ratio or Buffer	Proposed Risk-based Ratio Requirements		Proposed SLR Requirements
	Components of Requirement	Current Range**	
Minimum External TLAC Ratio	18% (on a fully phased-in basis)		9.5%
External TLAC Buffer	2.5% + Method 1 G-SIB surcharge + countercyclical buffer	3.5% to 5%	N/A
Minimum-plus-Buffer External TLAC Ratio	Minimum external TLAC + external TLAC buffer	21.5% to 23%	N/A
Minimum External LTD Ratio	6% + Method 2 G-SIB surcharge	7% to 10.5%	4.5%

- TLAC requirements aim to bolster GSIBs' capital and leverage ratios, ensuring these banks are equipped to continue critical functions without threatening financial market stability or requiring further taxpayer support

These financial measures focus on ensuring banks have available, reliable funding during times of stability and stress

Bank Profitability Basics

A bank's most basic profitability goal is to earn more interest on its book of loans than it pays in interest on deposits

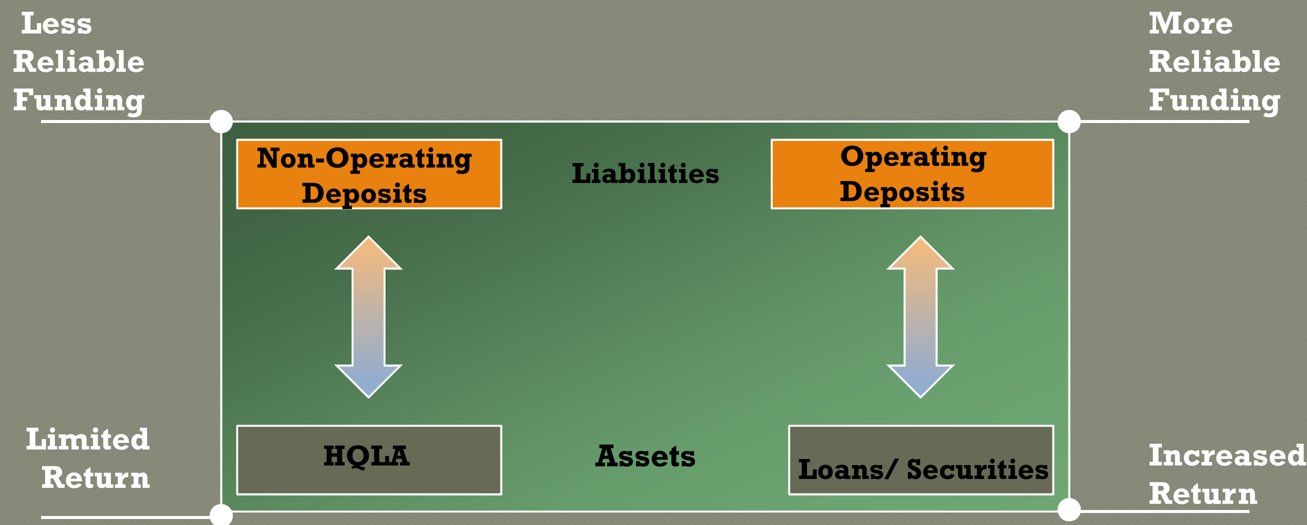


Basel III has impacted interest income by requiring more capital to be held in reserve

The Changing Regulatory Environment

Bank funding sources: usability and return

- The classification of the balance has a direct impact on the usability of that funding for banks and the opportunity for return.
- Under the regulations, a higher percentage of non-operating balances need to be deployed against High Quality Liquid Assets (HQLA).



- HQLA (e.g. U.S. Treasuries) provide liquidity and reliability but offer reduced return when compared with the return opportunity for reliable funding deployed against a traditional bank loan.

Restrictions on the use of non-operating balances limit the opportunity for return

What Are the Key Impacts of the Basel III Framework on Deposits?

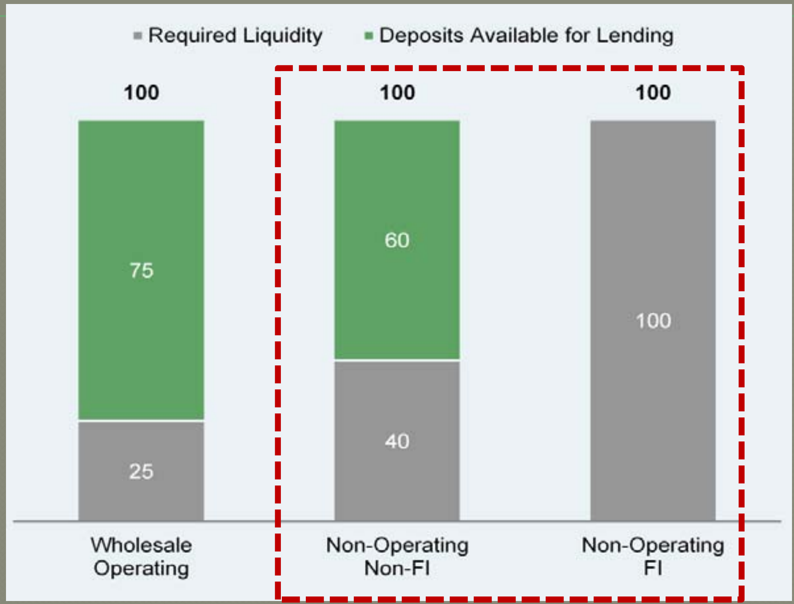
Liquidity linked to operating services

- For every **$100MM** in wholesale ("corporate") deposits:
  - 30 day run-off during a market event → **25%**
  - Required bank liquidity → **$25MM**

Non-operating / Wholesale Liquidity

- For every **$100MM** in deposits:
  - Corporates, Sovereigns, Central Banks and **Public Sector Entities (PSE)**:
    - 30 day run-off during a market event → **40%**
    - Required bank liquidity → **$40MM**
  - Financial institution (FI) and correspondent banking balances:
    - 30 day run-off during a market event → **100%**
    - Required bank liquidity → **$100MM**

Illustration of Liquidity ($MM)



Key Takeaways

- There will be **more demand for HQLA** under the new regulations potentially **impacting the supply available to serve as collateral for Public Sector deposits**
- Banks will carry **significantly higher costs on public sector and non-operating balances** vs. Corporate operating balances which may impact available yields
- There could be a disparity between how clients define operating balances and what the regulators will permit banks to classify as operating balances.
- Banks will likely **channel certain non-operating funding to appropriate off–balance sheet vehicles** such as Money Market Mutual Funds.

Basel III: What it Could Mean For You

Impact to Banks

- Higher capital reserve requirements for all deposit types particularly collateralized public sector funds and non-operating balances
- Banks are impacted by enhanced capital requirements and higher regulatory compliance costs

How it may impact you

- Some types of deposits may no longer be attractive to some banks
  - Holistic banking relationships will be critical; operational accounts are key
  - Banks may look to channel excess non-operating liquidity into off balance sheet alternatives
- Lower yields for excess liquidity is likely the new normal

Strategies for managing liquidity in the new environment

- Consider **collateral alternatives** for public deposits including:
  - Federal Home Loan Bank Standby Letters of Credit
  - Expanded collateral types such as local municipal securities
  - Reduced or no collateral requirements for certain balances
- Focus on forecasting and **segmenting liquidity** to maximize the value of cash throughout the cycles of receipts and payments
  - Optimize operating cash, intermediate reserve cash as well as longer term strategic investment funds
- **Utilize Money Market Mutual Funds and/or direct investment in U.S. Treasury & Agency securities** for excess non-operating liquidity

Translation

- Impacts on collateral
- Impacts on fee assessments
- Impacts on services

Changes Reflect Global Concerns

- Liquidity and Leverage

- When banks pledge you collateral:
  - They are loaning their own portfolio
  - They reduce their access to the securities – liquidity
  - They increase use of their securities – leverage

- Banks have to reverse the potential impact

Changing Roles

- Banks move from depositories to service providers
- Banks concentrate on expenses/profit also
- Services become the focus
  - Electronic services expand into your operations
- Lending regulations decrease their need for funds and the need for deposits

Public Entities Aren't As *Pretty* Anymore

- Banks hampered by compliance requirements make public entities costly and less desirable and more difficult to serve

- Why public entities?
  - Fluctuating balances through the year
  - Requirements for collateral
  - High service demands
  - High volumes
  - Always repetitive and competitive bidding

Resulting Collateral Changes

- Banks view their alternatives on a financial basis
- Reduces amount of collateral available to pledge
  - Bank may offer letters of credit as substitute
- Some banks will <u>only</u> offer FHLB letters of credit
- Increased cost of collateral to the bank
  - Banks may charge a <u>collateral fee</u>

Why Letters of Credit

- Authorized by law for CA State – not local - *yet*
  - LOC from FHLB Regional Banks
  - Cost differential
    - Securities cost about 10-12 bps. and a LOC 5 bps.

- What is a LOC?
  - FHLB is a banker's bank owned by the member banks
  - Credit backing comes from the member banks
    - Tenuous line to the Treasury
  - Event of default conditions
  - Time requirements for amount changes
  - System stress

Your Decisions

- CA State law defines authorized collateral
- State pooling of collateral does not reduce bank's ratio difficulties
- Reductions in available collateral may exist/grow
- Banks may pull out of the public sector
  - Partially or totally
- Alternative investments may be necessary

New or Changed Fees

- Collateral fees
- FDIC fees

Public Unit FDIC Coverage

- Based on type of account – a change in definitions
  - All <u>time and savings </u>accounts = $250,000
    - Includes *NOW* and money market accounts
  - All <u>demand</u> accounts = $250,000
    - Includes interest bearing and non-interest bearing

- Based on location of bank
  - If the bank is <u>outside</u> the state all deposited are lumped together
  - This has changed from ‘headquarters”

FDIC

An FDIC Example

- Under the changed rules:
- MUD X has:
  - $585,000 in demand accounts
  - $195,000 in time and savings accounts
  - The MUD has $445,000 in FDIC coverage
- FDIC coverage is calculated
  - $250,000 (demand) + $195,000 (savings)

FDIC Coverage

- Political Unit Accounts
  - If created under express authority of law
  - Has some function of government delegated
  - If it executes exclusive control of its funds for exclusive use
- Special cases
  - 4a and 4b corporations
  - Water supply corporations

FEDERAL DEPOSIT INSURANCE CORPORATION
INSURING AMERICA'S FUTURE

FDIC Assessments

- Banks are beginning to pass through FDIC fee
  - Not all banks pass through – ask! - verify
- Based on bank but basically 0.12%
- Higher balances hurt on collateral and FDIC fee
- Known by many names
  - FDIC does not allow use of FDIC name for fee

Higher Balances Can Hurt

	Balance	FDIC Assessment
Watching your balances	$ 21,250,000	$ 21,257
materially reduces your	$ 10,000,000	$ 10,000
FDIC charges.	$ 8,000,000	$ 8,000

Collateral Fees

- Some banks may charge a fee for collateral
- Collateral costs banks about 10-12 bps
  - So $10 million pledged costs about $800 each month
- Charges can range in cost
- Charges may result from any deviation from PFCA

Sign of Reduced Expenses

Pledges By Pledgee And Maturity

Pledged To: CITY OF

Happy State Bank - Amarillo, TX

IPA

As Of 9/30/2011

Receipt# / Safekeeping Location	CUSIP	Description / Maturity	Prerefund	Pool/Type / Coupon	Moody / S&P	Original Face / Pledged Percent	Pledged Original Face	Pledged Par	Pledged Book Value	Pledged Market Value
TIB: TIB	3128PRPX1	MBS FHLMC 10 Yr 05/01/20		J12238 4.00		6,740,000.00 100.00%	6,740,000.00	5,245,612.32	5,568,961.34	5,568,961.36
TIB: TIB	31417YXS1	MBS FNMA 10-YR 03/01/21		MA0688 4.00		5,525,000.00 100.00%	5,525,000.00	4,879,599.83	5,177,458.68	5,177,458.65
TIB: TIB	31410LEW8	MBS FNMA 15-Yr 01/01/24		890349 6.00		5,150,000.00 100.00%	5,150,000.00	4,885,026.42	5,436,534.29	5,436,534.28
TIB: TIB	3128PRJ67	MBS FHLMC 04/01/25		J12085 4.00		6,650,000.00 100.00%	6,650,000.00	4,882,503.82	5,180,416.68	5,180,416.67
TIB: TIB	31419AMZ7	MBS FNMA 15-Yr 07/01/25		AE0375 4.00		6,125,000.00 100.00%	6,125,000.00	5,010,872.24	5,332,686.05	5,332,686.04
5 Securities Pledged To:		**68 - CITY OF**					**30,190,000.00**	**24,903,614.63**	**26,696,057.04**	**26,696,057.00**

Although the information in this report has been obtained from sources believed to be reliable, its accuracy cannot be guaranteed.

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254

New World to Consider

- Collateral Alternatives
- Money market mutual fund use
- Sweeps as a collateral alternative
- Alternative investments
- Service view

Alternatives to Collateral

- Investment options within the bank
- Investment options through the bank
- Investment options outside the bank

New SEC Rules for MMMF

- New regulations are directed towards safety, liquidity and stability

- Minimum 10% in securities convertible to cash in 1 day
- Minimum 30% in securities convertible to cash in 1 week

- Maximum WAM shortened to 60 days
- Maximum WAL of 120 days
  - weighted average life to reduce use of variables

- Monthly reporting to SEC on shadow prices

- Create procedures for stress tests

New Rules for MMMF

- Repo collateralized with US Obligations or cash only
- Ability to process at price not $1
- Maximum 3% in second tier securities (higher risk securities)
- Maximum of 5% in illiquid securities
- Know Your Investor requirements added
- Ability to suspend redemptions to prepare for liquidation

New Money Market Rules

- SEC has turned <u>PRIME</u> money funds into mutual funds
  - <u>Not</u> strive to maintain $1
  - <u>Not</u> authorized by PFIA
  - Fluctuate with market values (price)
  - Can reflect principal loss
  - <u>Not</u> authorized for bond proceeds

  - What does <u>your policy</u> say?
    - *Money market mutual funds, excluding prime funds or*
    - *Money market funds which strive to maintain a $1 NAV.*

Sweeps Reduce Collateral
and FDIC Assessments!

- Effective when rates are higher than now
- Sweeps move funds out of the bank daily
  - You are investing in a money fund security
  - Reduces balances on which FDIC fees apply
- Investment in fund (security) eliminates collateral

Direct Investment

- Investing in securities outside banks
- Yield curve changes have created opportunities

Direct Investments

- US Obligations (Treasury and Agency)

- Commercial paper

- Changes in yield curve rates carry over to ECR
  - Earnings credit rates will be less attractive
  - Earnings outside the banks will be more more attractive
  - Cash flow will become <u>even more</u> important

Service Choices

- Reducing non-electronic bank interfaces
- Remote deposit and ACH use
  - Reduce personal contact in the branch
- Reduction of faxes, paper reports, etc.
- Monthly account analysis verification

Summary Impact on You

- Banks are presenting new services and investment vehicles
- Banks are creating competition for operational balances
- Banks will desire less non-operational funds
- Banks focus on collateral considerations
  - Decreasing collateral to improve required ratios
- ECR rates will change slowly with higher rates
  - Monitor them versus outside rates for best value
  - At some point it is detrimental to maintain bank funds

Thank you!

Questions?