Capital Modernization Project Consultation

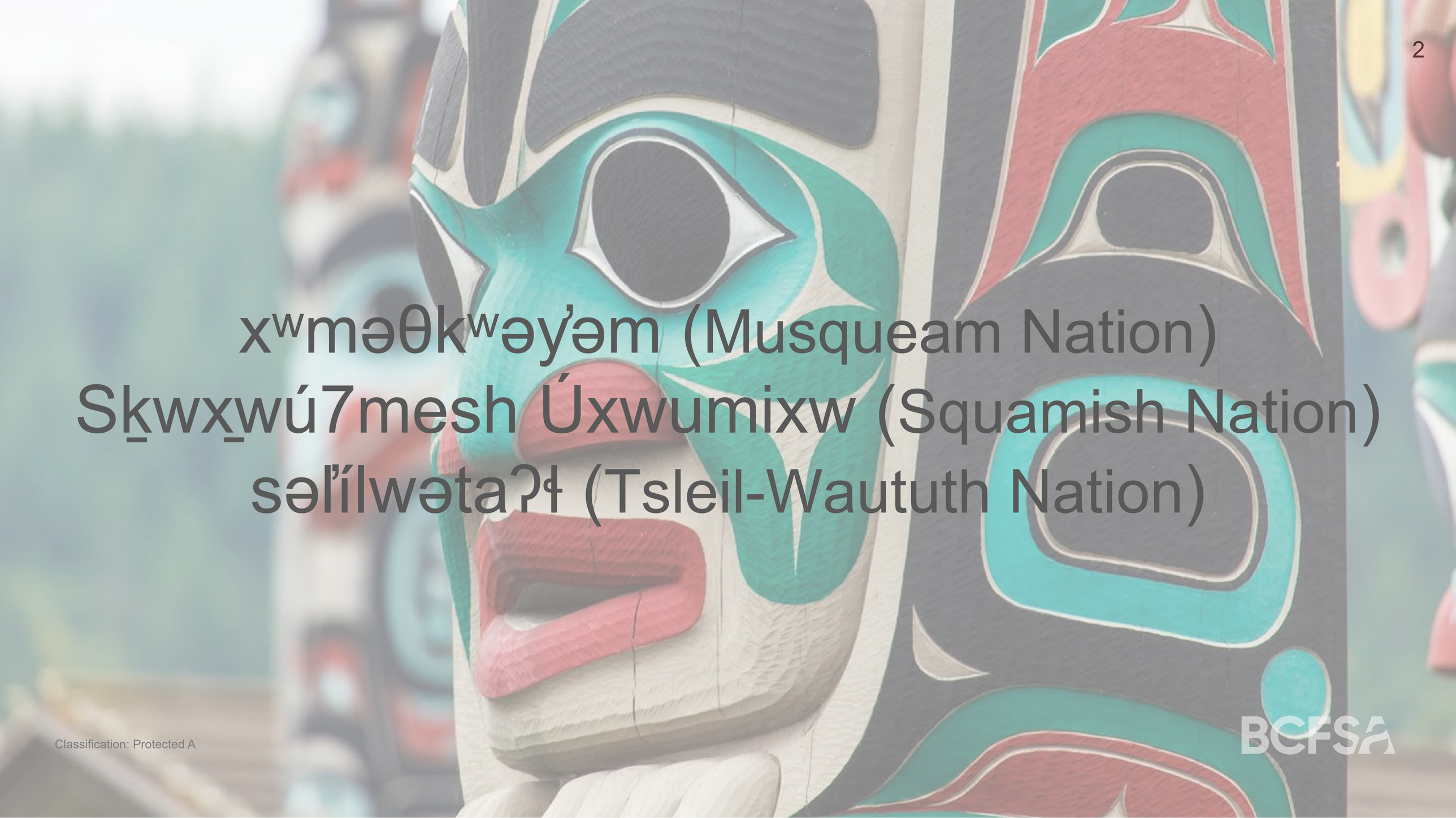
Information Session 3:

Capital Buffers, Operational Risk, Leverage Ratio and Market Risk Overview

September 14, 2023

BCFSA BC Financial Services Authority

Classification: Protected A



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BCFSA

Agenda

1. Capital Buffers
2. Operational Risk
3. Leverage Ratio
4. Market Risk
5. Questions and Answers
6. Next Steps

Capital Buffers

Basel III Capital Buffers Overview

- Capital buffers are required reserves held by financial institutions put in place by regulators.
- Basel III Mandated Capital Buffers.
  - **Capital Conservation Buffer** or “CCB” (2.5% of total RWA):
    - Ensures banks build up capital buffers outside periods of stress that can be drawn down as losses are incurred;
    - Automatic capital conservation rules designed to avoid breaches of minimums; places restrictions on discretionary distributions (dividends, share buy-backs, staff bonuses);
    - Must be met with CET1; and
    - Capital plans must seek to rebuild buffers over an appropriate timeframe.

Basel III Mandated Capital Buffers:

- Capital Conservation Buffer
- Countercyclical Buffer
- G-SIB Surcharge
- D-SIB Surcharge

BCFSA Capital Conservation Buffer

Consultation Paper, Proposal 3(a)

Adopt Capital Conservation Buffer: 2.5%.

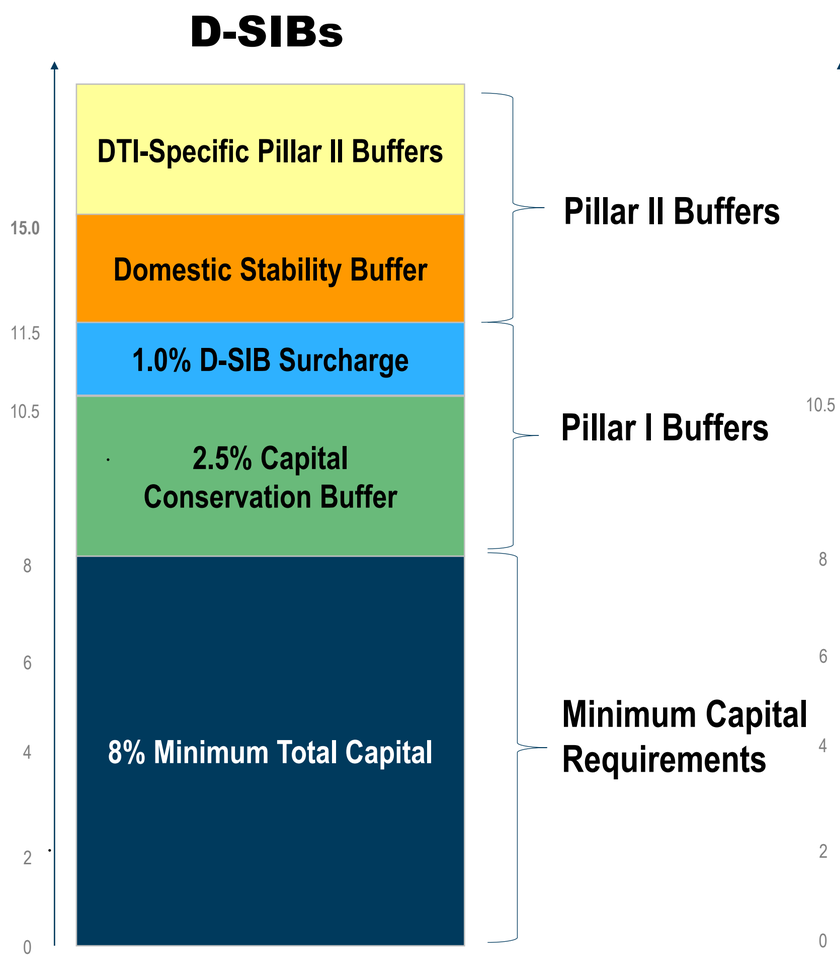
Capital distribution constraints are triggered when capital levels fall within the buffer range; BCFSA intends to specify and detail the constraints in the rule.

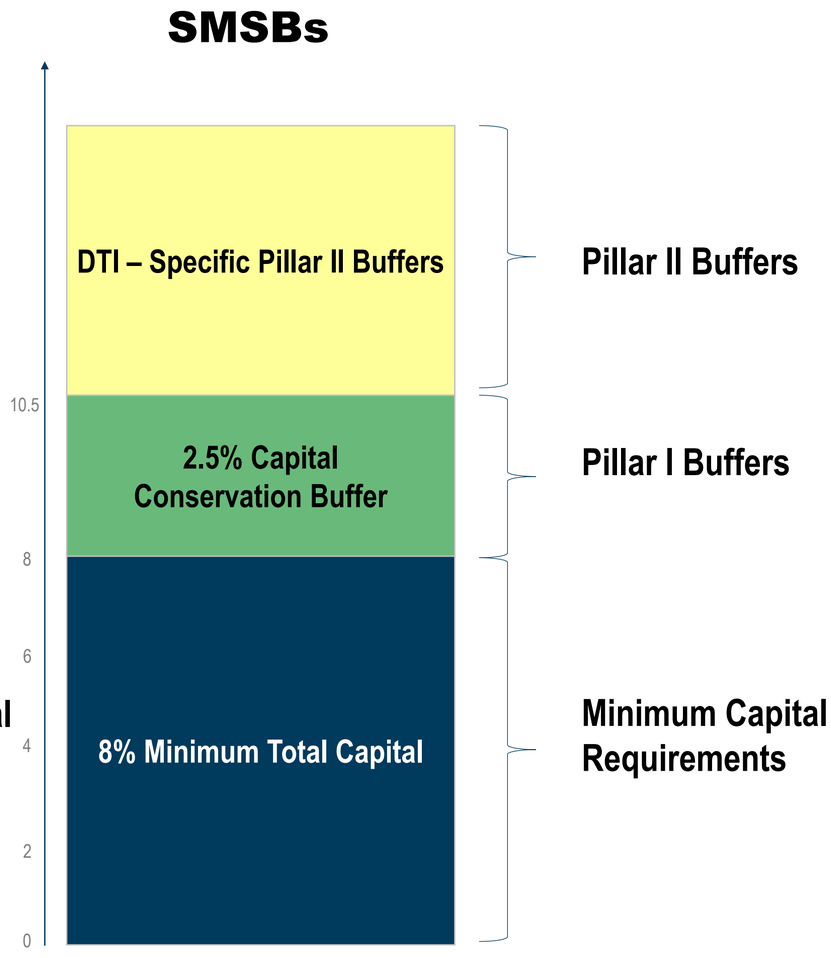
BCFSA supervisory expectations will apply as appropriate.

Total Capital Stack

OSFI

DTI Capital Expectations (% of RWA)





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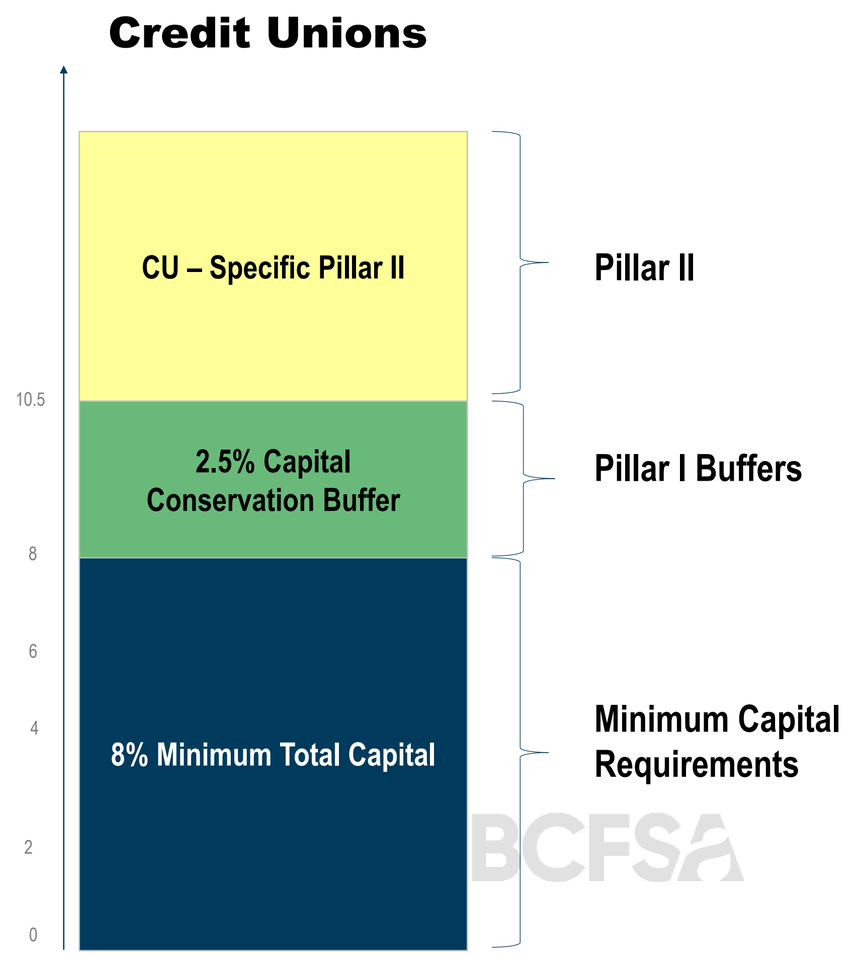
Capital Expectations (% of RWA)



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Operational Risk

Operational Risk Overview

Consultation Paper section 2.2

Operational risk is the risk of loss resulting from inadequate or failed internal processes, systems, human errors or external events.

- Includes legal risk.
- Excludes strategic and reputational risk.

Operational Risk Overview

OPERATIONAL RISK MANAGEMENT CHALLENGES

- Unlike credit and market risk, the number and diversity of OP risk types have enlarged and become more defined (e.g., unauthorized trading, third-party risk, fraud, questionable sales practices, misconduct, new product risk, cyber risk).
- Requires oversight and transparency of all organizational processes and business activities.
- At the same time, digitization and automation are changing the nature of work, reducing traditional human errors but creating new change management risks.
- Need for a capital framework that incorporates an appropriate capital charge for operational risk.

Operational Risk Overview

BASEL DEVELOPMENT

- The Basel Committee first introduced a capital charge for operational risk as part of Basel II in 2008. Three approaches:

    1) Basic Indicator or BIA (simple);
    2) Standard (consideration given to business lines); and
    3) Advanced Measurement (use of models).

- Basel has streamlined the original three operational risk approaches and adopted a single Standardized Approach which incorporates actual loss data.

- The Basic Indicator Approach has been dropped from Basel III. For the time being, regulators continue to apply it to small financial institutions.

Operational Risk – Basic Indicator Approach

Operational risk capital in Pillar 1 is new to B.C. credit union system. Intent to advance into the more risk sensitive standardized approach in the future.

The Basic Indicator Approach (“BIA”) uses an FI's gross income as a proxy for operational risk because it is a good indicator of the volume and complexity of its business activities, which can increase potential for operational risk events.

BIA lacks risk sensitivity; no use of historical loss data.
Reasonable starting point pending the possibility of a more risk sensitive approach in future.

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Basic Indicator Approach Overview

Capital requirement under the Basic Indicator Approach, K_{BIA}:

$$K_{BIA} = \frac{\sum\left(GI_{1\ldots n} \times \alpha\right)}{n}$$

- GI is annual gross income (where positive) over the previous 3 years; loss years not included in numerator and denominator;
- n is the number of the previous three years for which gross income is positive; and
- α is 15% (set by the Basel Committee, relating the industry-wide level of required capital to the industry-wide level of the indicator).

Risk-weighted assets for operational risk = K_{BIA} x 12.5 (12.5 is the multiplier to translate the operational risk capital requirements into a risk weighting corresponding to an 8% minimum total capital requirement ratio; (i.e., the reciprocal of 8%).

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Example – calculation of BIA

- Current year = 2023
- Gross Income (as defined) for previous 3 years:
  - 2022: $2,500,000
  - 2021: $(1,500,000)
  - 2020: $3,000,000

$$K_{BIA} = \frac{\sum\left(GI_{1\ldots n} \times \alpha\right)}{n}$$

- α = 15%
- Calculation:
- 2023 capital requirement for operational risk K_{BIA}: $\frac{(\$2{,}500{,}000 + \$3{,}000{,}000)}{2} \times 0.15 = \$412{,}500$
- 2023 RWA for operational risk: $412,500 x 12.5 = $5,156,250

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BIA – Definition of "Gross Income"

Gross income is defined as net interest income plus net non-interest income – as defined under IFRS

- gross of any provisions (e.g., for unpaid interest);
- gross of operating expenses, including fees paid to outsourcing service providers;
- exclude realized profits/losses from the sale of securities in the banking book; and
- exclude extraordinary or irregular items.

Leverage Ratio

Leverage Ratio (“LR”) Overview

Consultation Paper section 4

ROLE OF LR

- Reinforce the risk-based capital requirements with a simple, non-risk-based "backstop" to complement risk-based capital requirements.
- The global financial crisis (2007-8): build-up of excessive on- and off- balance sheet leverage.
    - Yet, many banks maintained strong risk-based capital ratios; and
    - Deleveraging exacerbated the crisis.
- Leverage ratio vs Risk-Based Capital ratio.

Leverage Ratio Overview, continued

$$\text{Leverage ratio} = \frac{\text{Eligible Capital}}{\text{Exposure Measures}}$$

Eligible Capital

- Tier 1 Capital.

Exposure Measures

- Sum of the following exposures:
  - On-Balance sheet exposures;
  - Derivative exposures;
  - Securities financing transaction exposures; and
  - Off-balance sheet exposures.

Regulatory Minimum = 3%

Exposure measure adjustments:

- The netting of specific provisions or accounting valuation adjustments (e.g., accounting credit valuation adjustments) is allowed.
- Netting of loans and deposits not allowed.
- No credit for physical or financial collateral, guarantees or other credit risk mitigation.
- Balance sheet assets deducted from Tier 1 capital are excluded from the On-Balance sheet exposures.

Market Risk

Work underway to define BCFSA expectations and methodology

Market Risk – Overview

Consultation Paper section 2.3

- Ensure that financial institutions have adequate capital to withstand market events, and to increase the resilience of the financial sector in the event of a crisis.
- Market risk includes but is not limited to interest rate risk, credit spread risk, equity risk, foreign exchange (“FX”) risk and commodities risk.
- Due to credit union’s business models, the main contribution to market risk arises from Interest Rate Risk (“IRR”). Hence, we are focusing our market risk discussion on IRR and the need to allocate capital.

Market Risk

Interest Rate Risk (“IRR”)

Interest Rate Risk in the Banking Book (“IRRBB”)

- Credit union’s balance sheet positions, related to deposits and mortgages and similar products (products with similar structure, cashflows and payoffs), including those held only for hedging risks related to these products.

Additional consideration

- Mandatory Liquidity Pool.
- Trading Book positions.

Consideration

- Basel Interest Rate Risk in the Banking Book.
- Standardized approach for market risk.
- Rapidly evolving market conditions.
- Operational implementation.

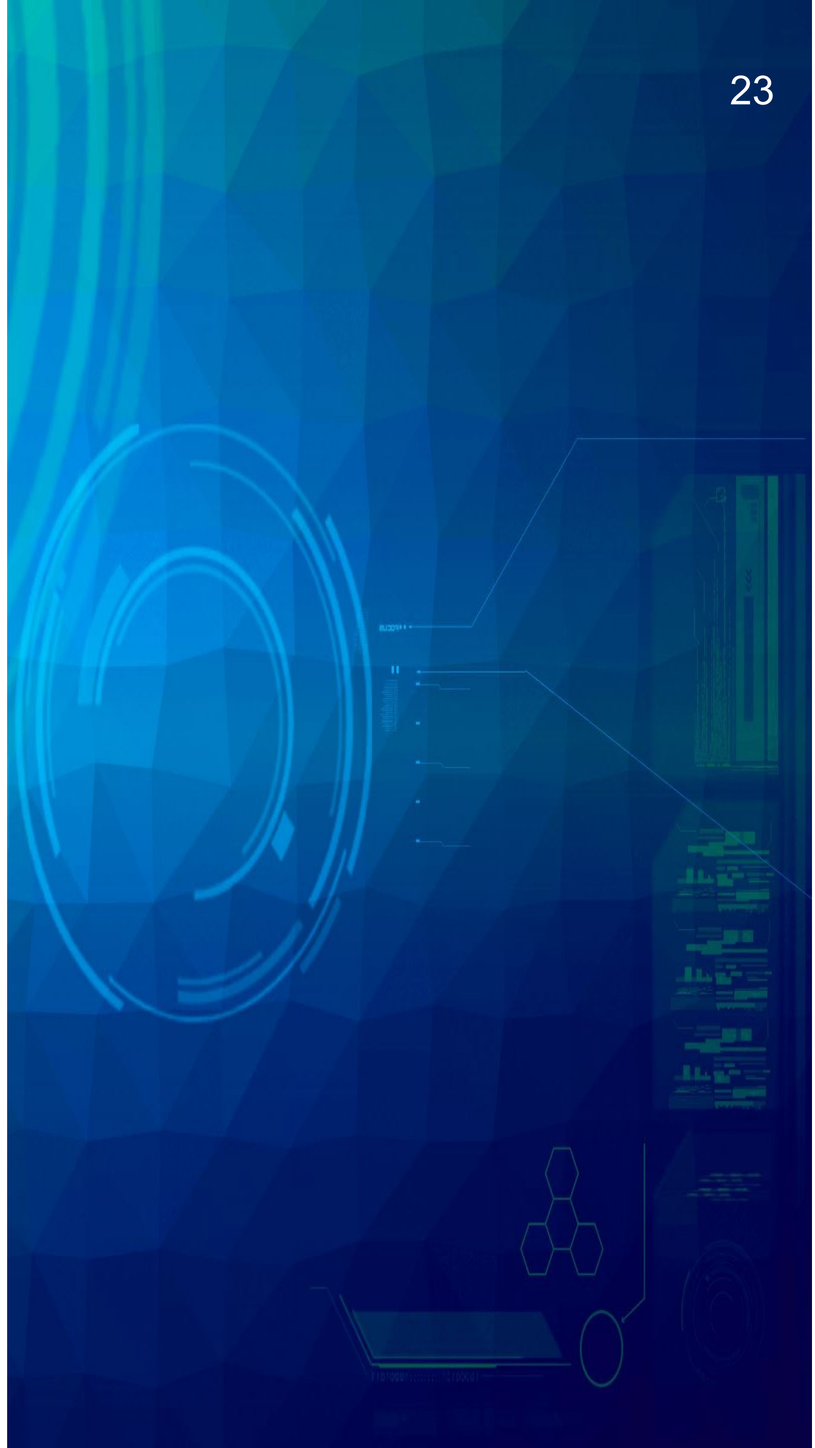
Market Risk

Interest Rate Risk

NEXT STEP: COMPREHENSIVE REVIEW

- Examine current IRR methodologies and ICAAP (“Internal Capital Adequacy Assessment Process”) reporting.
- Review internal models and models utilized by credit unions or third-party vendors or service providers.
- BCFSA to perform independent impact assessment.

Final decision on approach will be based on the findings.



Questions?

Contact: CUCapital@bcfsa.ca

NEXT STEPS

INFORMATION SESSIONS

- ✓Session 1 – Capital Modernization Consultation Launch – August 3
- ✓Session 2 – Capital Overview – September 7
- ✓Session 3 – Capital Buffers, Operational Risk, Leverage Ratio, and Market Overview – September 14
- Session 4 – Credit Risk Overview – Thursday, September 21, 1 – 3 pm

Please submit your questions in advance using the AskUs Form.

Consultation Period ends on November 6, 2023.

Reminder: Have your say!

- Complete the consultation feedback form included in the Consultation Paper and on our website.
- The consultation will be open for submissions until **November 6, 2023.**
- Please contact CUCapital@bcfsa.ca if you have any questions or need more information.

Thank you.