LEVERAGE RATIO DISCUSSION MATERIALS

October 2013

The GFMA & TCH Basel III Leverage Ratio Survey Covers 26 Banks Across the US, Europe, Canada, and Japan

North America

- 13 survey participants
- Asset volume of USD 13 trillion

Total Europe

- 11 survey participants
- Asset volume of USD 18 trillion

Eurozone

- 6 survey participants
- Asset volume of USD 12 trillion

Japan

- 2 survey participants
- Asset volume of USD 3 trillion

- Survey includes **26 banks** with a total **asset volume of USD 34 trillion**, including **18 out of 28 G-SIBs**
- To preserve confidentiality of participants, this document uses the following **aggregation levels**
  - Eurozone
  - Total Europe
  - North America
  - Total (excl. Japan[1])
  - G-SIBs (incl. Japan)
- The survey uses **Q2/2013 data** for 16 of 26 banks; the remaining 10 banks provided either Q1/2013 or Q4/2012 data

1 Japan excluded due to limited number of survey participants for which results would be identifiable as difference between total and the other regions

SOURCE: Basel III leverage ratio survey

Survey Data is Drawn from the Basel QIS – Additional non-QIS Data Also Gathered to Assess Impact on Written CDS

Data requested from participating banks	Required for	Excerpt from data templates
Accounting balance sheet	• Comparison of Basel III leverage exposure to balance sheet assets	See template excerpt 1
Leverage ratio calculation	• Calculation of current leverage ratio and potential shortfall • Understanding key drivers of exposure measure	See template excerpt 2
Information related to risk-based ratios and LCR	• Calculating constraints from other Basel III measures, i.e., capital shortfall against risk-based ratios or liquid assets need against LCR requirement • Determination of **incremental impact**	See template excerpt 3
More detailed exposure breakdown (best effort basis)	• Scenario analyses on varying exposure definitions	See template excerpt 4

Template excerpt 1:

	Item
1	On-balance sheet items (exclude derivatives and securities financing transactions; include collateral)
2	On-balance sheet derivative financial instruments
3	On-balance sheet securities financing transactions (repos and similar secured lending)
4	**Total on balance sheet assets**

Template excerpt 2:

#	Item	Amount	Link to QIS
	On-balance sheet exposures		
1	On-balance sheet items (exclude derivatives and securities financing transactions; include collateral)		16K
2	Assets deducted in determining Basel III Tier 1 capital		122D
3	**Total on-balance sheet exposures** (excluding derivatives and securities financing transactions)	0	Calculated
	Derivative exposures		

Template excerpt 3:

#	Item	Amount	Link to QIS
	Capital		**DefCapB3**
1	Tier 1 common		D63
2	Tier 1 capital (fully loaded)		D75
3	Tier 1 capital (adjusted)		
	RWA		**General Info**
4	Basel I RWA		
5	Basel III Standardized RWA		
6	CVA Capital Charge (RWA equivalent)		F113
7	Basel III Advanced RWA		D214
	Liquidity		**LCR**

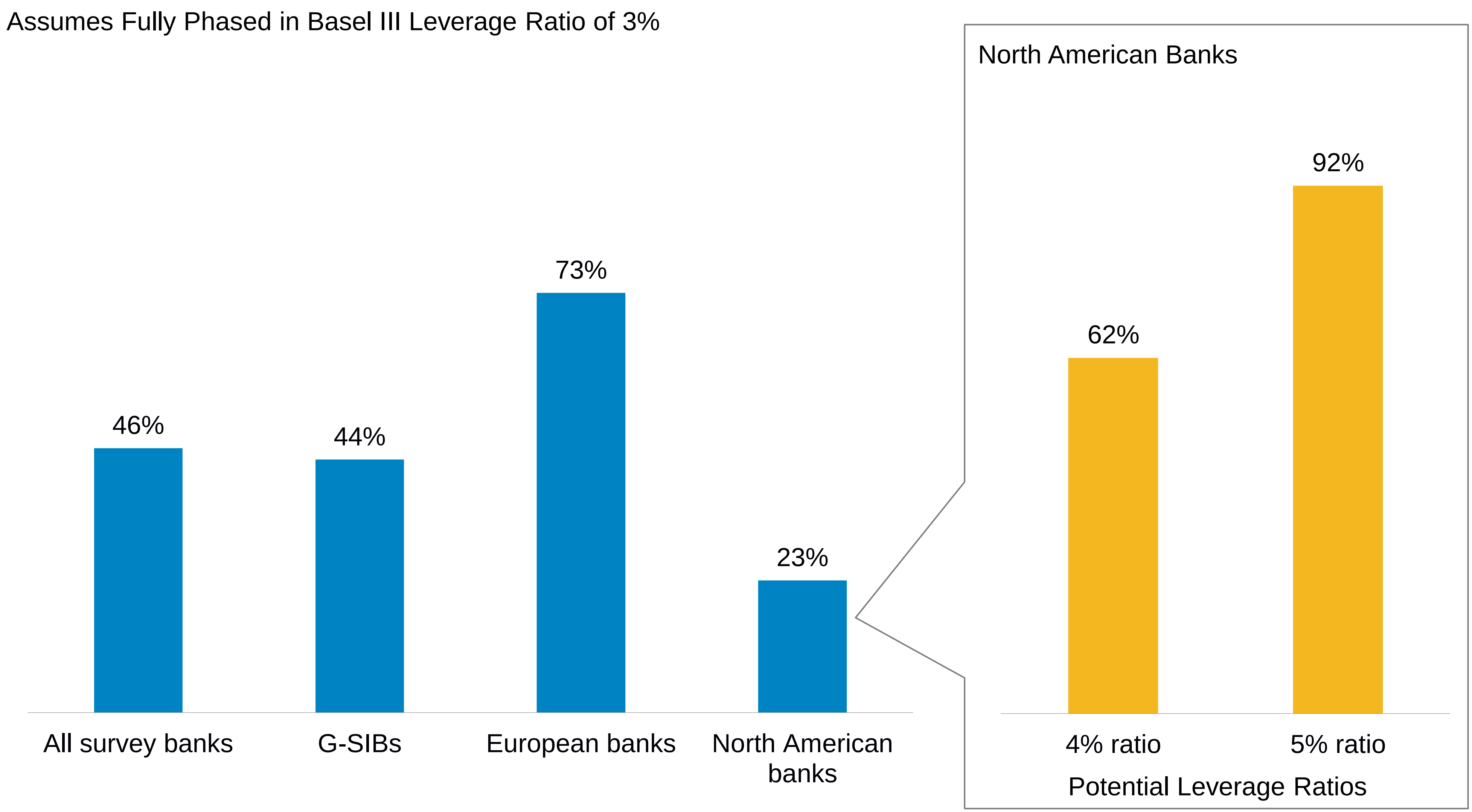
Template excerpt 4:

#	Item	Amount	Link to QIS
	Other off-balance sheet exposures		
5	Off-balance sheet exposures with 100% credit conversion factors; of which:		[question 15 in 'leverage ratio disclosure' form]
5a	*commitments including liquidity facilities*		*parts of M46 and M47*
5b	*trade finance exposures with 20% CCF in SA*		*part of M46*
5c	*guarantees, etc. with 50% CCF in SA*		*part of M47*
5d	*credit substitutes, etc. with 100% CCF in SA*		*part of M48*

SOURCE: Basel III leverage ratio survey

46% of Survey Participants Would Have Leverage Ratios Below 3% Under the Proposed Basel III Leverage Framework

Percent of Banks With Leverage Ratios Below 3% [1]

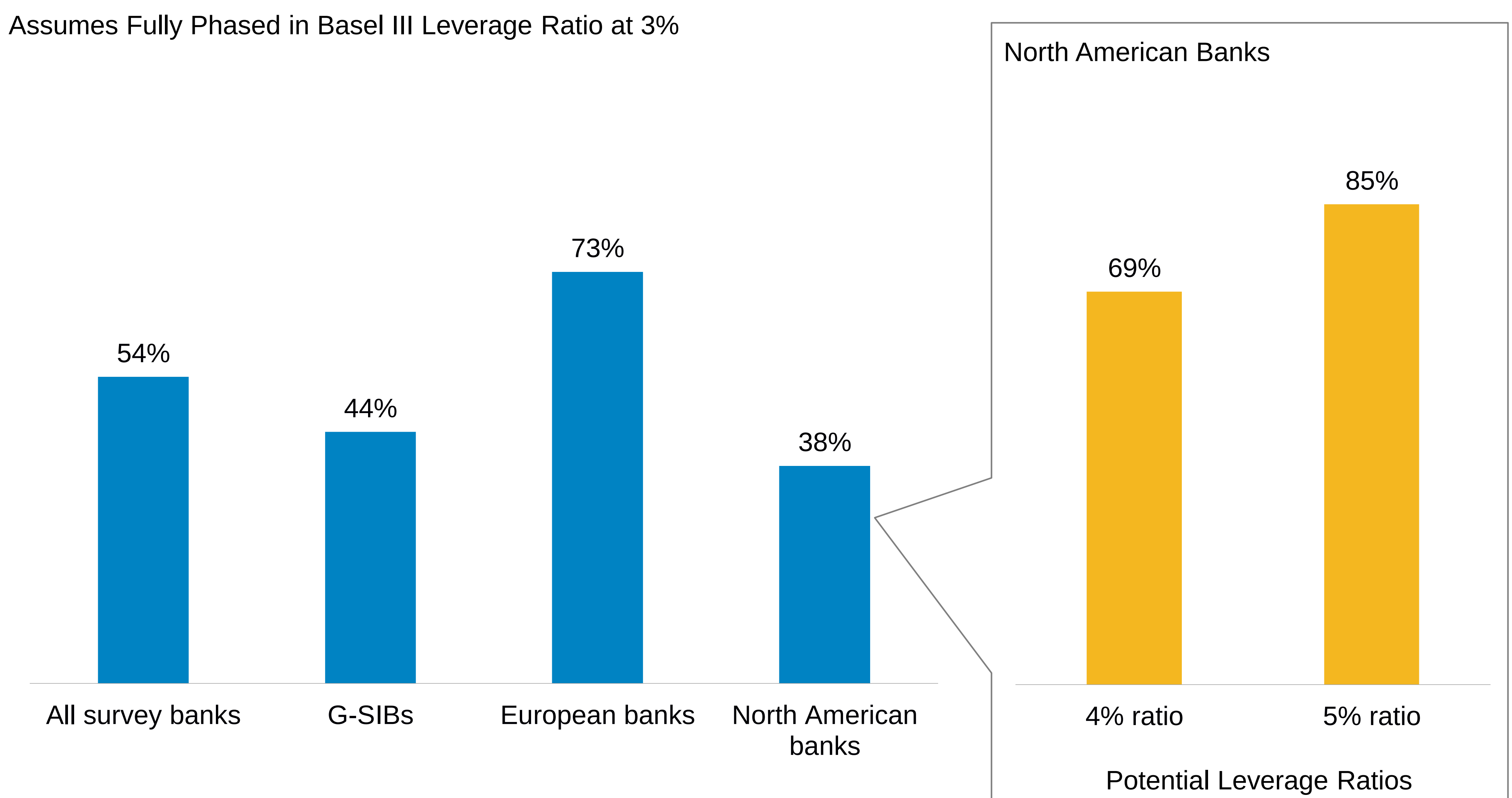


Source GFMA survey

Note
1. Percent of 26 banks participating in global GFMA survey includes 18 G-SIBs,

54% of Survey Participants Would Become Constrained by Leverage-Based Capital, Rather Than by Risk-Based Capital, Under the Proposed Rule

Percent of Banks Constrained by Leverage-Based Capital, Rather Than Risk-Based Capital, Under the Revised Proposed Leverage Ratio (1)



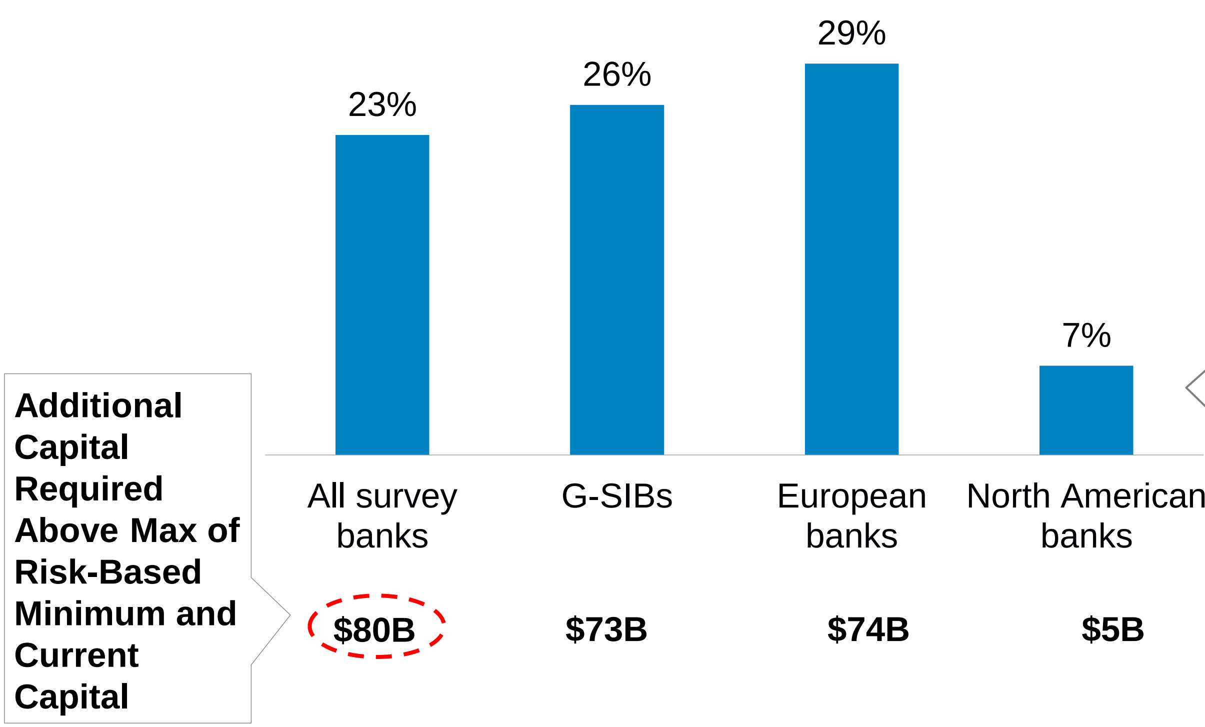
Source GFMA survey

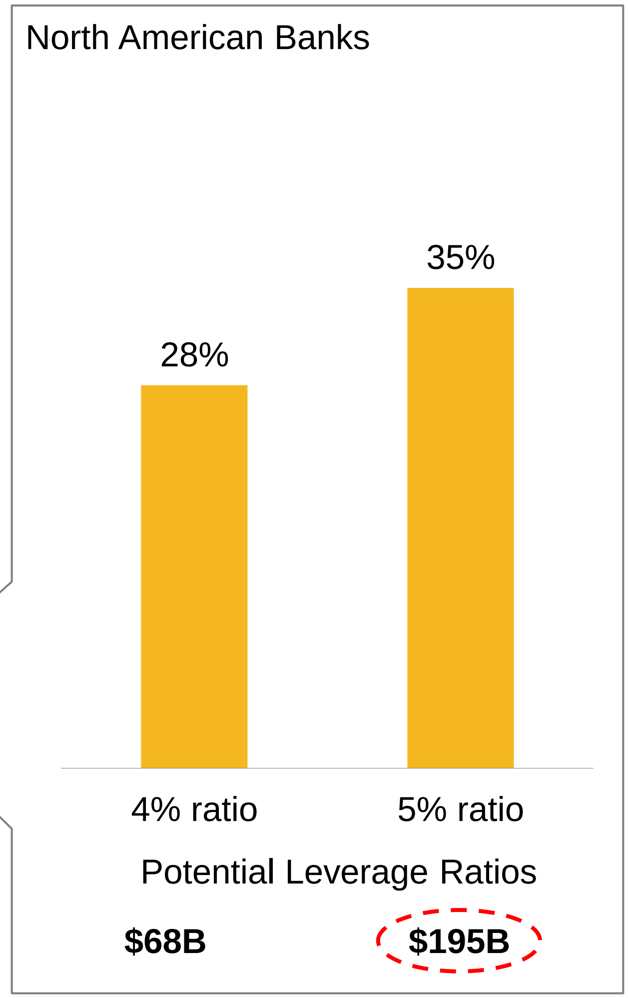
Note
1. Percent of 26 banks participating in global GFMA survey includes 18 G-SIBs,

Banks That Would Fail to Meet the 3% Minimum Could Choose to Increase Capital, But the Size of the Required Increase Appears Impractical

Increase in Capital Required [1] To Meet 3% Leverage Ratio Requirement

Percent Increase in Required Capital at a 3% Minimum Threshold
Incremental to the Maximum of: (a) Risk-Based Minimum and (b) Current Capital



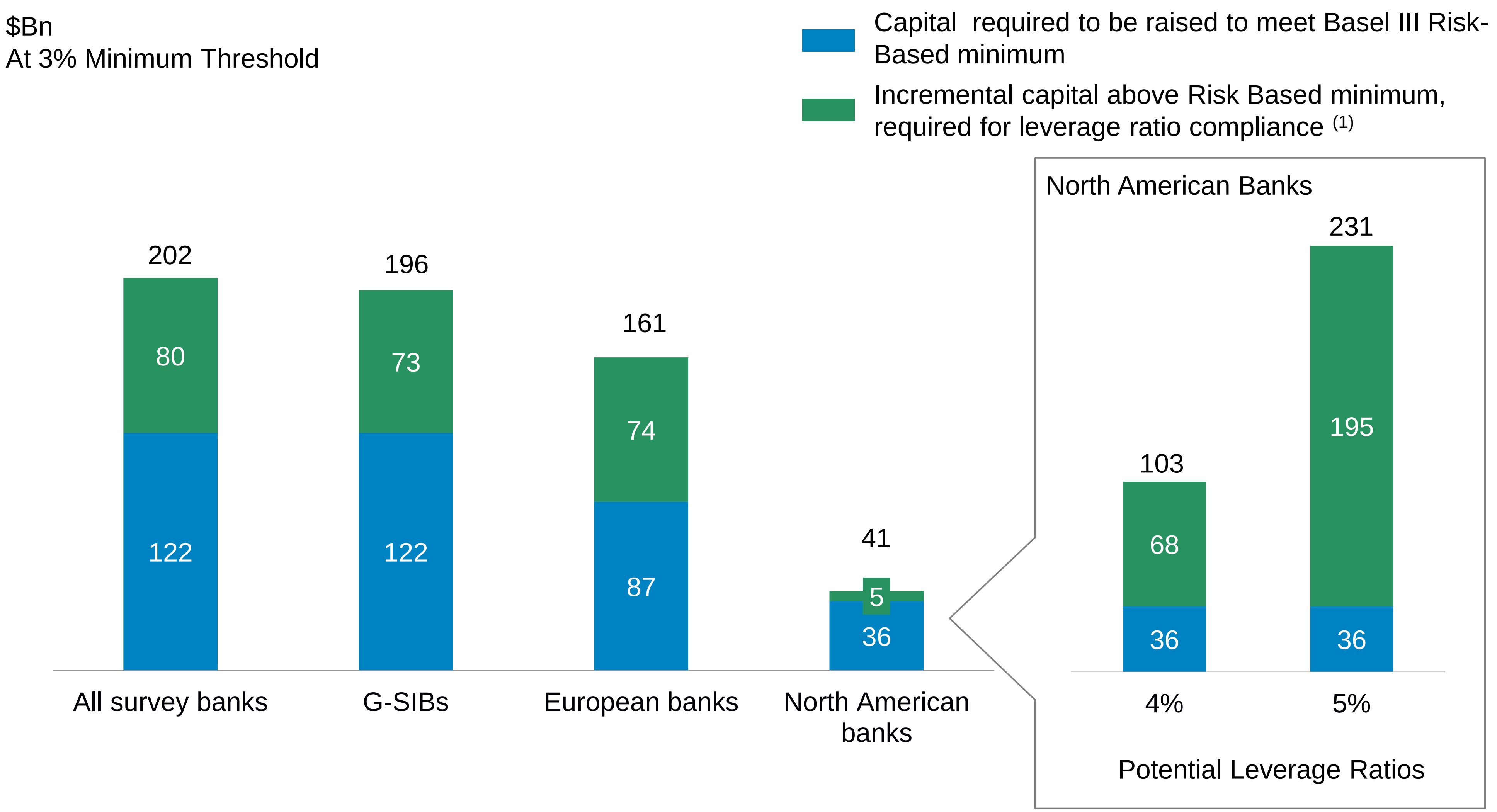


Source GFMA survey

Note
1. Above the greater of risk-based capital minimum and current capital

Combined With the Capital Banks Will Need to Raise to Meet Existing Risk-Based Capital Requirements, the Total Capital "Gap" Among Survey Participants Could Reach $200Bn or More

Increase in Capital Required To Meet Risk-Based and Leverage-Based Capital Requirements



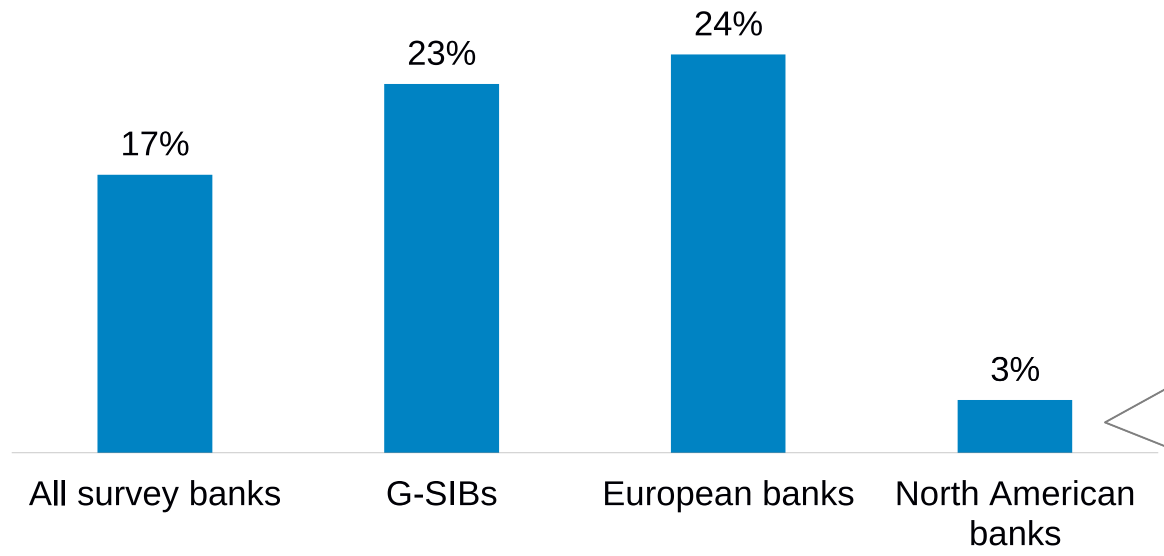
Source GFMA survey

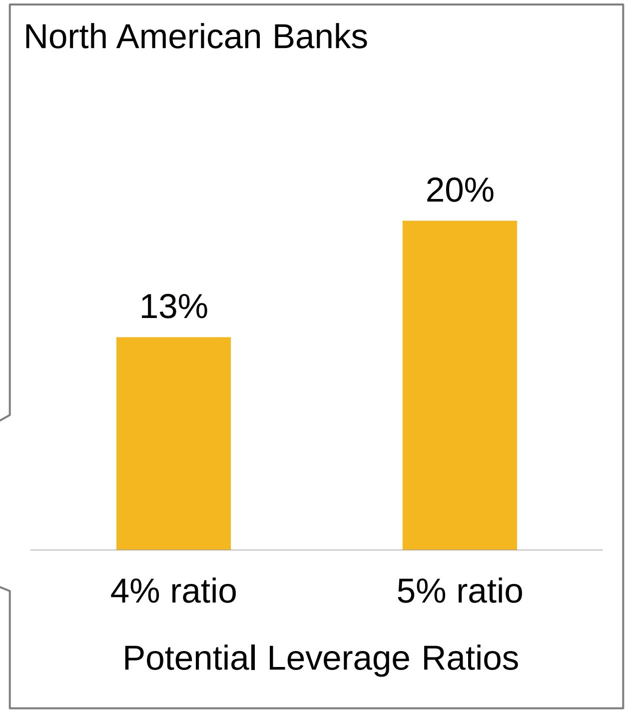
Note
1. Incremental capital required to meet 3% minimum leverage ratio, above the maximum of (i) current available capital and (ii) minimum required risk-based capital

If Banks Facing Higher Capital Requirements as a Result of the New Leverage Ratio Choose to Raise New Equity, They Would Need to Increase Net Income by 17% to Offset the Negative Effects on ROE

Increase in Banks Earnings Required To Cover the Cost of Equity on Incremental Equity Required to Meet Leverage Ratio Minimum [(1)]

Percent Increase in Net Income Among Survey Participants That Are Constrained by Leverage-Based Capital At a 3% Minimum Threshold





Methodology:

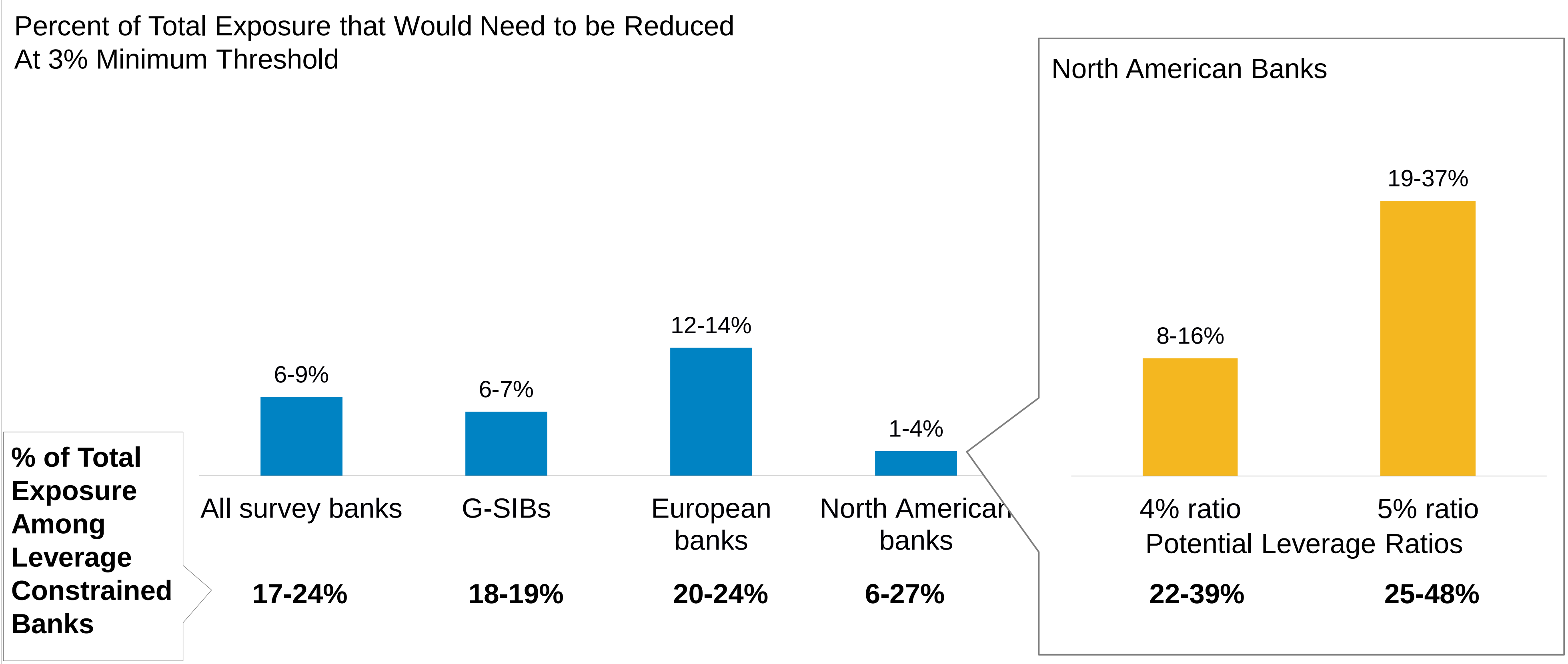
- 8% net cost of incremental equity = post-tax cost of equity at 11.5% minus post-tax cost of debt at 3.5% [(2)]
- Incremental required post-tax income = net cost of equity (8%) multiplied by the amount of incremental equity that would need to be raised
- Incremental required post-tax income is divided by FY2012 net income, adjusted for both DVA and company reported one-time items

Source GFMA survey

Note
1. Incremental capital required to meet 3% minimum leverage ratio, above the maximum of (i) current available capital and (ii) minimum required risk-based capital
2. Cost of equity and cost of debt sourced from BIS working paper "Macroeconomic impact assessment of OTC derivatives regulatory reforms", August 2013; 4.5% cost of debt adjusted to post tax equivalent of 3.5% using assumed 35% tax rate

Alternatively, Banks That Would Now Become Constrained by Leverage-Based Capital Could Achieve the 3% Minimum By Reducing Their Exposure

Reduction in Total Exposure Among All Survey Banks to Achieve 3% Minimum, Assuming No Increase in Capital



The range of reduction in exposure is calculated based on two methodologies:

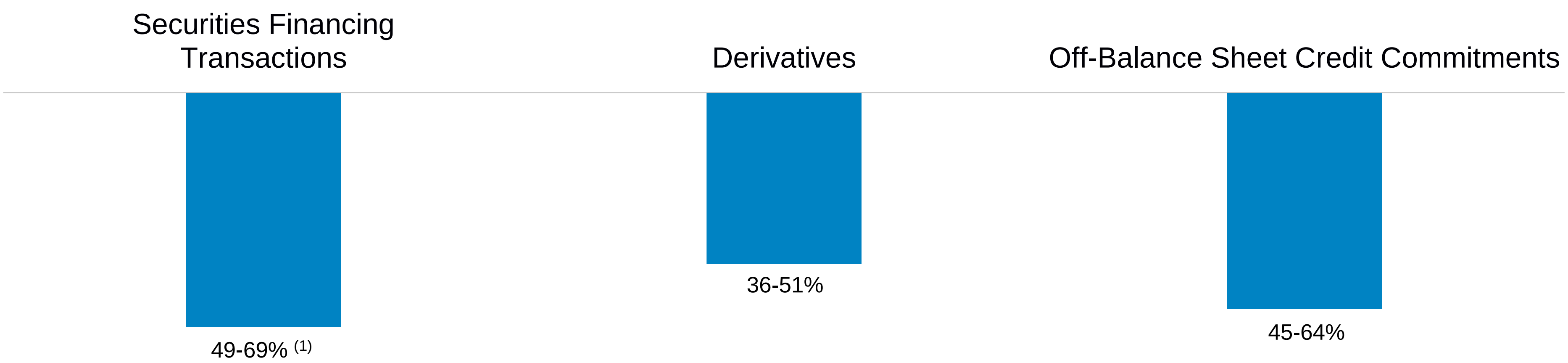
(1) The first methodology assumes that banks that are constrained by the leverage ratio reduce their exposure to a level that is consistent with the maximum of: (a) their currently available capital, and (b) the capital required to meet their minimum risk-based capital needs

(2) The second methodology assumes banks that are constrained by the leverage ratio reduce their exposure to a level that is consistent with the amount of capital required to meet their minimum risk-based capital needs

To Reach the Exposure Levels Required by the Revised Proposal, Banks May Choose to Reduce Activity in the Lowest Exposure-to-RWA Areas; This Could Have a Disruptive Impact on Key Product Markets

Reduction in Exposure Required to Reach 3% Minimum, Assuming Full Reduction is Applied to a Single Product Category – All Survey Banks

Percentage of total exposure in each product area across all survey participants



- If banks that would become constrained by leverage-based capital, rather than by risk-based capital under the new rules, were to achieve compliance with the Revised Proposal under a 3% minimum by reducing their exposure, they would likely reduce their exposures across a number of different product categories
- However, they might concentrate that reduction disproportionately on those products which were least economically viable under the new rule
- For illustrative purposes, the analysis outlined above shows the percentage reduction in total exposure among the survey banks that would occur if banks that were constrained by leverage-based capital were to reduce their excess exposure solely through one product category
- As a result, the percentage reductions shown above are not additive to one another

Source GFMA survey

Note
1. All ranges of reduction based on methodology described on prior slide