

Potential Adverse Consequences Arising from the Proposed Basel III Leverage Ratio

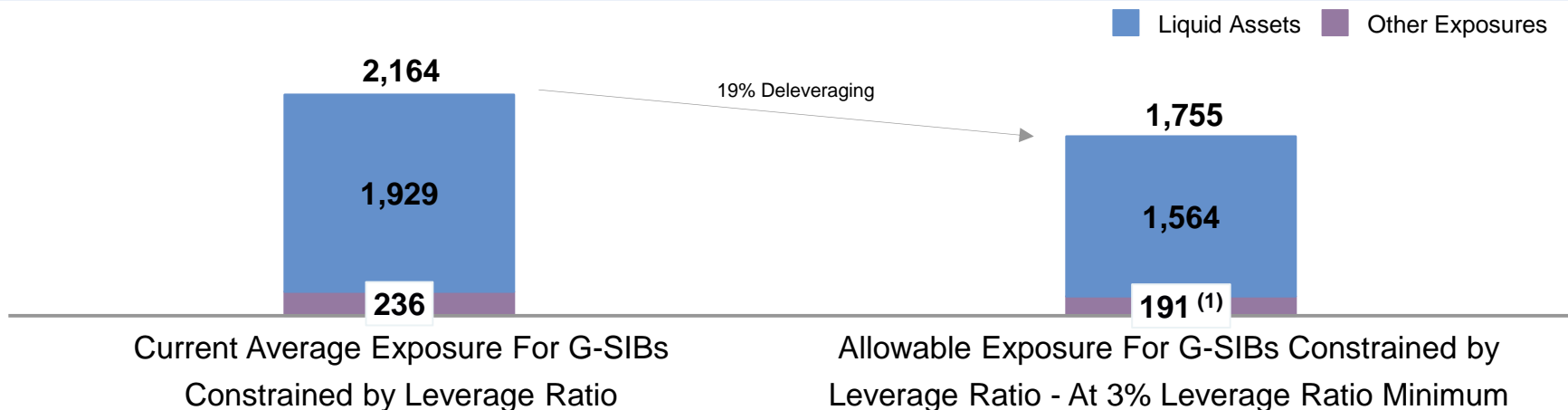
October 31, 2013



Adverse Consequence #1: Incent Banks to Hold Higher Risk Assets

Exposure Available For Revenue Generation at Different Leverage Ratio Thresholds

Average Exposure for G-SIBs Constrained by Leverage Ratio in \$Bn



Source GFMA survey

Return on Exposure Required to Maintain 2012 Revenues and ROE

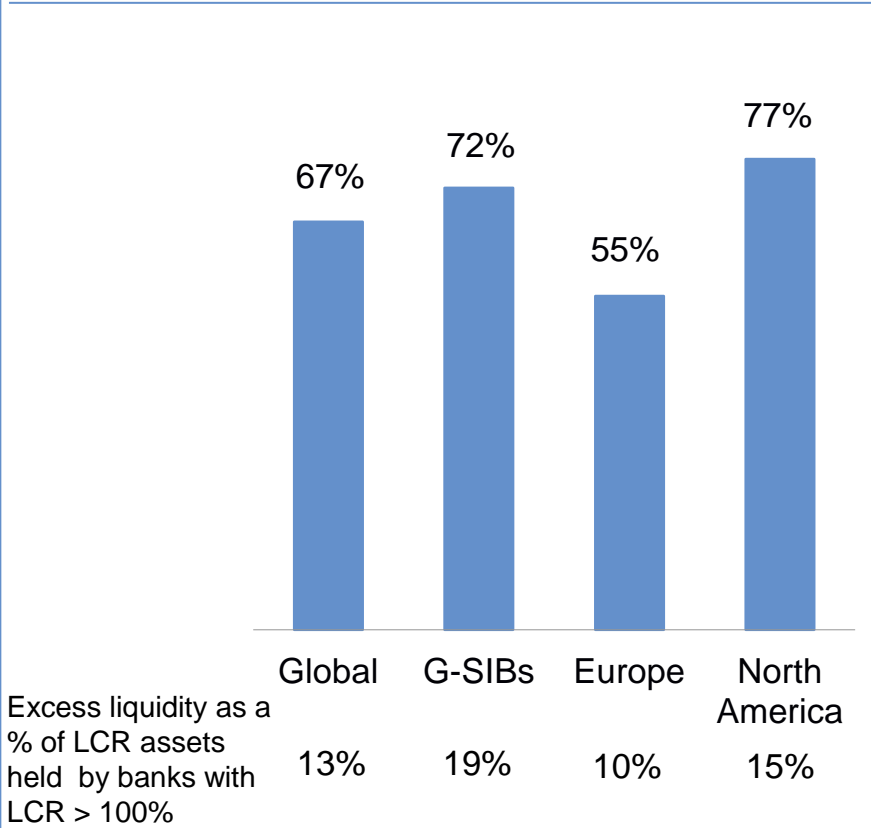
	2012	3% Leverage Ratio at 2012 Revenue
Revenue / Exposure (liquid assets)	25bps ⁽²⁾	25bps ⁽²⁾
Revenue / Exposure (all other exposures)	192bps ⁽³⁾	237bps ⁽⁴⁾
% Change in Revenue / Exposure		24% ⁽⁵⁾

Notes

- \$191Bn pro forma exposure estimate for "Liquid Assets" assumes a 19% reduction from the current \$236Bn average, proportionate to the reduction in total exposure required for all banks that would be leverage constrained
- 25 basis point ratio of revenue-to-exposure is based on rate paid by U.S. Federal Reserve for cash balances held on deposit by banking institutions
- 192 basis point ratio of revenue-to-exposure for "all other exposures" is calculated as follows: (1) numerator equals the average 2012 revenue of all G-SIBs in survey that would be constrained by leverage-based capital under Revised Proposal (excluding those revenues generated on "liquid assets"); this net revenue is approximately \$37Bn; (2) denominator calculated as the \$2,164Bn in average exposure available to G-SIBs constrained by the Revised Proposal, less the \$236Bn exposure dedicated to "liquid assets"; this results in an average of \$1,929Bn in exposure available for revenue generation on "all other exposures" by leverage constrained banks
- 237 basis points represents the ratio of revenue-to-exposure on "all other exposures" that would be required to be generated by leverage constrained banks on the \$1,564Bn in pro forma exposure that would not be dedicated to "liquid assets". This 237 bps represents the level of revenue productivity necessary for the average leverage constrained bank to maintain revenues equal to 2012 levels, assuming "liquid assets" earn 25bps
- The 24% increase in revenue productivity is calculated as follows (237 basis points divided by 192 basis points) minus 1

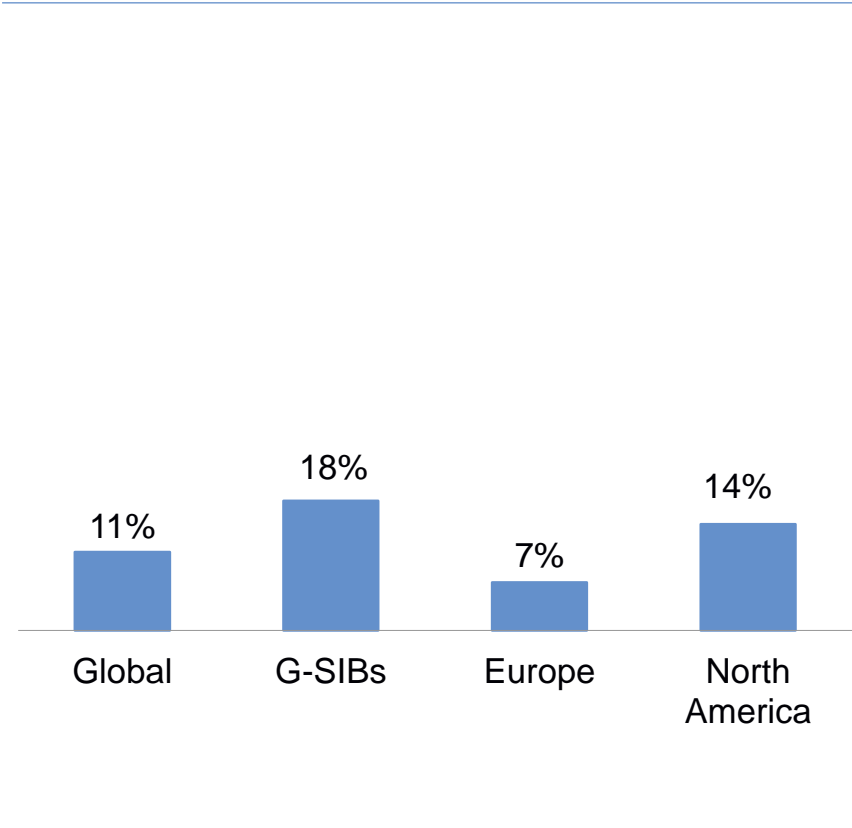
Adverse Consequence #2: Discourages Banks from Maintaining High Levels of Low-Risk, Low-Yielding Liquid Assets

Percent of Banks with Liquidity Coverage Ratio (LCR) in Excess of 100%
Percent of GFMA survey banks



Source GFMA survey

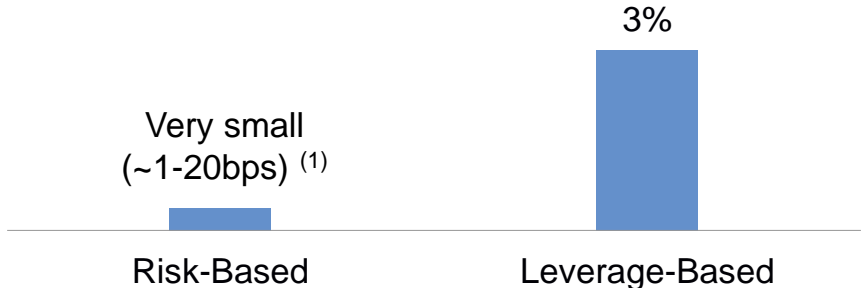
Excess Liquidity As a Percentage of LCR Assets Held By All Banks in Sample ⁽¹⁾
Percent



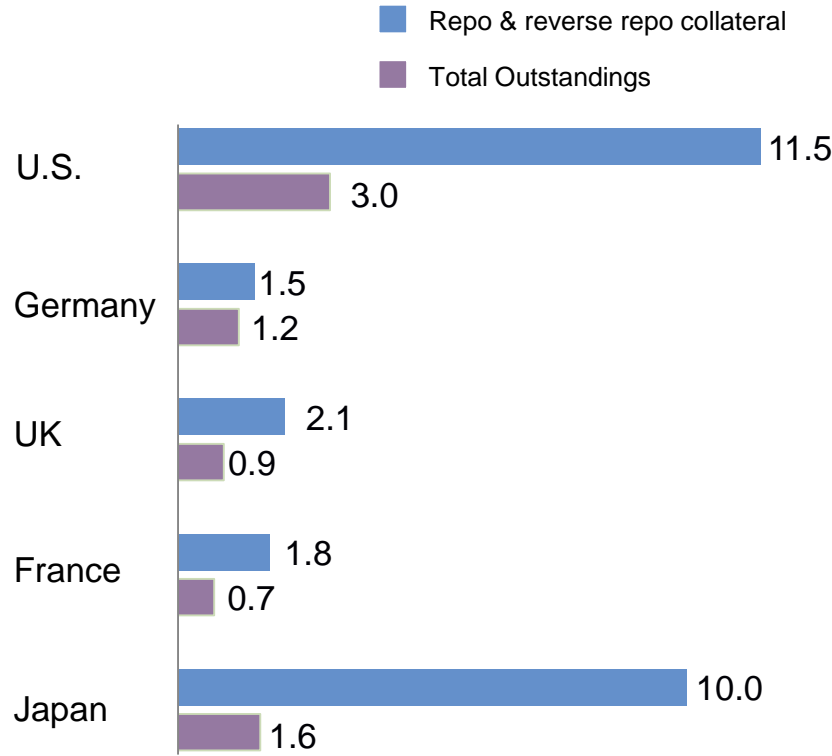
Notes
 1. Excess liquidity as a percent of total LCR assets is calculated as (i) the sum of LCR assets held in excess of 100% of the LCR minimum for all survey banks, divided by (ii) the sum of LCR assets for survey banks
 2. \$415Bn represents the aggregate amount of cash, including deposits at central banks, held by survey banks that have liquidity coverage ratios in excess of 100% and which would be available to be reduced. To estimate the amount of cash that could be reduced for each of these banks, GFMA identified the minimum of (i) LCR assets above the LCR minimum; and (ii) LCR cash. GFMA then aggregated this minimum "excess cash" for each bank to arrive at the \$415Bn total. The total is intended to estimate the amount of cash that could potentially be released by banks under the new rule

Adverse Consequence #3: Increases Government Borrowing Costs by Undermining The Financing of Government Bonds

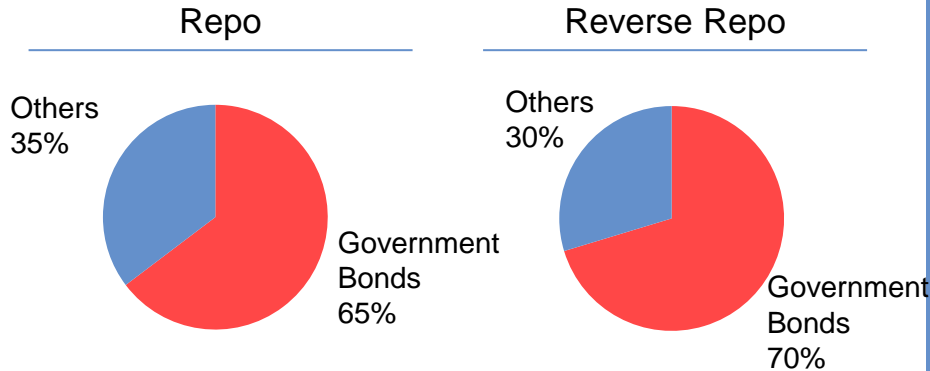
Capital as Percent of Exposure for Repo Transactions
Percent



Government Bonds Used as Collateral in Repo & Reverse Repo Transactions vs. Total Government Bonds Outstandings
\$Tn USD



Government Bonds as Percent of Repo & Reverse Repo Collateral – U.S. Primary Dealers



Source: Federal Reserve Bank of New York

Source: US: Federal Reserve Bank of New York; Europe: International Capital Markets Association; Japan: Bank of Japan

Note
1. The 1-20bps of risk-based capital as a percent of exposure is calculated based on the following assumptions: (a) the Risk Weight of 4-60% is calculated assuming 1-month maturity; investment grade credit ranging from BBB- to AAA with default probabilities calculated based on S&P data; loss given default estimated at 35% (mid-point of 20%-50% range); (b) the Exposure at Default is calculated as a percent of notional and is estimated at ~1-3% since positions are overcollateralized; and (c) capital as a percent of risk weighted assets is estimated at 11%. Based on these assumptions, the capital as a percentage of notional = (4-60%) * (1-3%) * 11% = 1-20bps

Adverse Consequence #4: Increases Cost of Debt for Corporate Borrowers by Increasing Hedging Costs

Methodology

1

Select sample set of corporate entities

- Identify all U.S. corporates that had a CDS introduced between October 2008 and December 2012 (exclude financial services and government reference entities)

2

Compute reference yields before and after CDS introduction

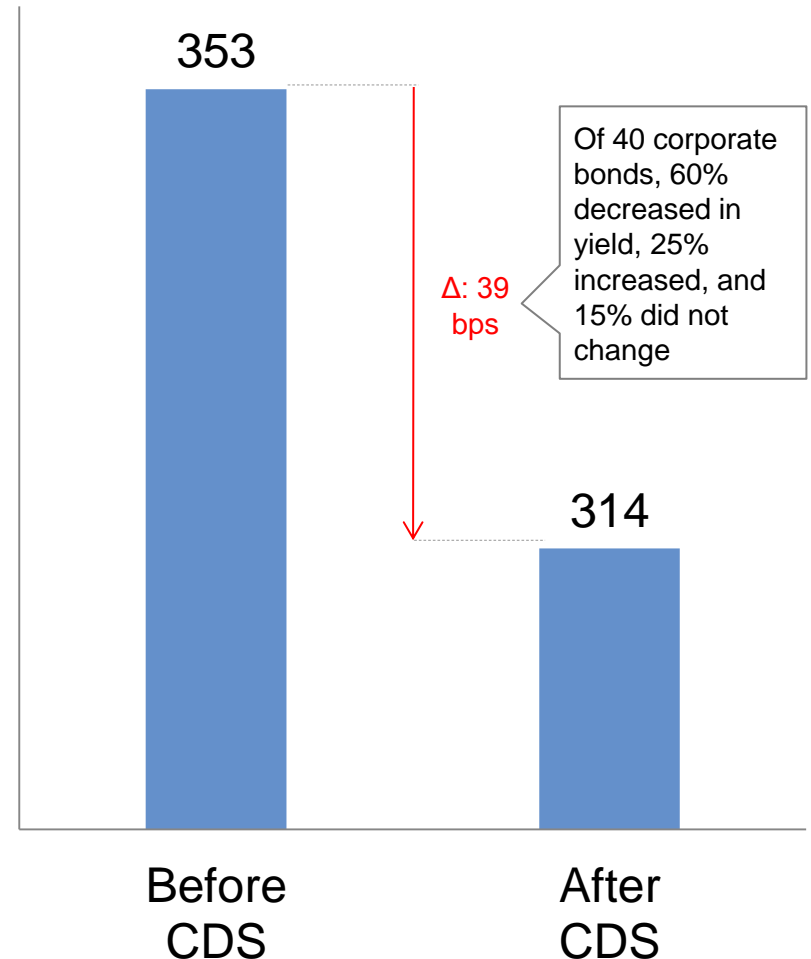
- For each corporate, select the bond that is closest to 5 years in remaining maturity (range between ~3 and ~7 years)
- Identify the average yield to maturity for the selected bond during the period 3 months prior to and 3 months following the introduction of CDS

3

Normalize yields with treasuries

- Calculate the credit spread over Treasuries by subtracting the yield of the U.S. Treasury with the closest remaining maturity as the selected corporate bond

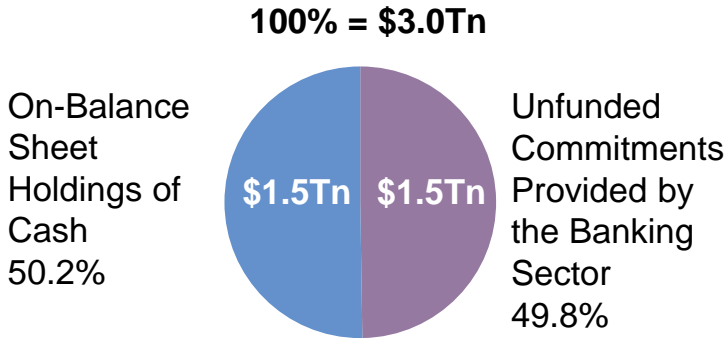
Yield Spread over Treasury



Source DTCC, Bloomberg, Capital IQ, Yield Book

Adverse Consequence #5: Reduces Access to Credit and Increases Cost for Corporate Borrowers

Sources of Cash Availability for U.S. Corporates ⁽¹⁾



- U.S. non-financial corporates have access to \$3.0Tn of cash through on-balance sheet cash holdings and unfunded commitments provided by the banking sector
- 50% of cash balances available to the largest 1,500 U.S. non-financial corporates are held in the form of undrawn liquidity commitments from commercial banks

Additional Costs Incurred by U.S. Corporates on Unfunded Commitments Under Revised Proposal

bps of notional	Leverage Ratio (3%)	Basel III RWA (5-25% Risk Wt ⁽²⁾)	Delta
Capital on Position	300	50-250	50-250
Capital on Liquidity Buffer	30 ⁽³⁾	N/A	30
Total Capital	330	50-250	80-280
Pre-Tax Return Required to Meet Cost of Capital at 17% Pre-Tax ROE ⁽⁴⁾	55	10-45	10-45

x 1.5Tn
= \$1.5-6.7Bn

- If the additional return that would be required to be earned on bank capital were passed on to borrowers, then U.S. non-financial corporates would need to incur an additional \$1.5-6.7Bn cost.
- This is equivalent to eliminating the profitability of 111-238 (or 7-16%) of the 1,500 corporates included in the analysis

Source Capital IQ Notes

1. Values shown are cash balances and unfunded commitments as of 12/31/2012 for the top 1,500 U.S. corporates, as measured by market capitalization
 2. The 5-25% risk weight on exposure is calculated based on the following assumptions: 3-year maturity; investment grade credit ranging from BBB- to AAA with default probabilities calculated based on S&P data; loss given default estimated at 35% (mid-point of 20%-50% range); ~50% probability of draw at time of default
 3. The amount of capital held against liquidity buffer on unfunded commitments is based on: (i) Liquidity Coverage Ratio rules that mandate 10% of notional must be held as a liquid asset buffer to achieve a 100% ratio; and (ii) leverage ratio requirement that 3% of these liquid assets be held as capital. 10% * 3% = 30bps. These liquid assets would draw little or no required capital under risk-based capital requirements.
 4. The 17% pre-tax ROE is based on the 10.8-11.5% post-tax ROE cited in BIS working paper "Macroeconomic impact assessment of OTC derivatives regulatory reforms, August 2013, p.45, grossed up for 35% expected tax rate

The GFMA Has Suggested Six Modifications to the Proposed Rule to Better Address the BCBS' Overall Policy Objectives

Suggested Modifications To The Proposed Rule

1

Exclude High Quality Liquid Assets – or at least Balances Held on Deposit at Central Banks - From Exposure Measure

2

Allow Legally Binding Netting of Receivables and Payables on Securities Financing Transactions (“SFTs”)

3

Recognize the Exposure Reducing Effects of Netting and Collateral on Derivatives through use of NIMM

4

Cap Exposure to Maximum Loss and Provide Netting Credit for Economically Effective Hedging on CDS

5

Estimate Drawdowns on Unfunded Credit Facilities Using More Accurate Assumptions

6

Exempt Client-Cleared Transactions from Exposure calculation to avoid undermining G-20 mandate to centrally clear OTC derivatives