



May 13, 2014

Mark E. Van Der Weide
Deputy Director, Banking Supervision and Regulation
Board of Governors of the Federal Reserve System

David Emmel
Manager Credit, Market, Liquidity Policy
Board of Governors of the Federal Reserve System

Dear Mr. Van Der Weide and Mr. Emmel,

We are writing in support of the letter you received from The Clearing House and other industry groups on January 31, 2014.

The proposed U.S. LCR introduced a requirement to calculate the cumulative difference between inflows and outflows by each of the 30 days in the stress period, and use the largest difference as the denominator of the ratio (aka "Peak Day requirement").

The stated purpose of the proposed Peak Day requirement is to ensure liquidity is held against potential asset/liability maturity mismatches or, in other words, to ensure that covered firms can survive through every day of the LCR's 30 day stress scenario.

Citi agrees with the intent of the Peak Day requirement, but has concerns with the impact of the requirement based on the proposed calculation methodology. Specifically, Citi is concerned that the Peak Day requirement, as currently written, will significantly undervalue the stability of a bank's deposit funding in the early days of a stress event.

Included in what follows are several examples that summarize the impact of the proposed Peak Day requirement:

- Scenarios #1 to #4 illustrate how different deposit runoff assumptions can impact the LCR via the Peak Day requirement.
- Scenario #5 illustrates how the Peak Day requirement could encourage short term wholesale borrowing, either in the form of Time Deposits or Commercial Paper, to offset the prescribed day-one impact of deposit runoff.

We look forward to discussing this with you.

Regards,

A handwritten signature in blue ink, appearing to read "Eric Aboaf". The signature is stylized and fluid.

Eric Aboaf
Treasurer
Citigroup

Balance Sheet Supporting Scenarios #1 to #4 Analysis

❑ The simplified balance sheet below is being presented for the purpose of assisting with the understanding of how the Peak Day requirement, as outlined in the U.S. proposed LCR, would apply in the following scenarios

❑ Example Bank:

Base Balance Sheet for Scenarios 1 to 4	
High Quality Liquid Assets - Cash	30
High Quality Liquid Assets - U.S. Treasuries (UST)	40
High Quality Liquid Assets - U.S. Agencies	15
Loans to Non-FI (Contractual) - 3 Day	35
Loans to Non-FI (Contractual) - 15 Day	25
Loans to Non-FI (Contractual) - 3 Year	155
Total Assets	300
Non-FI Corporate Deposits (Non-Contractual)	270
Commercial Paper - 21 Day (Contractual)	0
Capital	30
Total Liabilities & Equity	300
<u>Prescribed Haircut & Runoff Factors</u>	
HQLA - UST / Cash	0%
HQLA - U.S. Agencies	15%
Loans to Non-FI (Contractual)	50%
Non-FI Corporate Deposits (Non-Contractual)	40%

Non-FI = Non-Financial Institution

❑ This example bank is funded primarily by Non-Financial Institution Corporate deposits; an example of a Retail deposit funded Bank would face a similar situation as the subsequent pages depict

Scenario #1: U.S. LCR Rules ex. Peak Day requirement – Base Scenario

By applying the U.S. LCR rules excluding the Peak Day requirement, the table below demonstrates that the example bank can be above minimum standards with the 30 day Basel LCR standard

Scenario 1: U.S. LCR Rules ex. Peak Day Requirement - Base Scenario

	<u>Day 1</u>	<u>Day 2</u>	<u>Day 3</u>	<u>Day 4</u>	<u>Day 5</u>	<u>Day 6</u>	<u>Day 7</u>	<u>Days 8-15</u>	<u>Days 16-22</u>	<u>Days 23-30</u>	<u>Cum. 30 Day</u>	
HQLA - Cash											30	(a)
HQLA - UST (Post-Haircut)											40	(b)
HQLA - U.S. Agencies (Post-Haircut)											13	(c)
Total HQLA											83	(d) = (a) + (b) + (c)
Contractual Loan Inflows											30	(e)
Deposit Runoff											(108)	(f)
Net (Outflows)/Inflows											(78)	(g) = (e) + (f)
Cumulative Net Outflows											(78)	(h) = (g)
Net Surplus											5	(i) = (d) + (h)
LCR Ratio											106%	(j) = (d) / -(h)

Scenario #2: Peak Day Requirement with Overnight Deposit Runoff

- By applying the U.S. LCR rules (with the Peak Day requirement which specifies that all non-contractual deposits runoff on Day 1), the example bank would be required to adjust the composition of its balance sheet in order to comply with the Peak Day requirement
- With an overnight deposit runoff assumption, approximately 40% of deposits run off on the very first day, zero percent runoff on the subsequent 29 days, and 40% cumulatively by Day 30
- The Peak Day requirement would effectively force the LCR to become a Day 1 stress scenario

Scenario 2: U.S. LCR Rules with Peak Day Requirement & Unrealistic Overnight Deposit Runoff

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Days 8-15	Days 16-22	Days 23-30	Cum. 30 Day	
HQLA - Cash	30										30	(a)
HQLA - UST (Post-Haircut)	40										40	(b)
HQLA - U.S. Agencies (Post-Haircut)	13										13	(c)
Total HQLA	83										83	(d) = (a) + (b) + (c)
Contractual Loan Inflows	-	-	18	-	-	-	-	13	-	-	30	(e)
Overnight Deposit Runoff	(108)	-	-	-	-	-	-	-	-	-	(108)	(f)
Net (Outflows)/Inflows	(108)	-	18	-	-	-	-	13	-	-	(78)	(g) = (e) + (f)
Cumulative Net Outflows	(108)	(108)	(91)	(91)	(91)	(91)	(91)	(78)	(78)	(78)	(78)	(h) = Day X (g) + Day X-1 (h)
Net Surplus	(25)	(25)	(8)	(8)	(8)	(8)	(8)	5	5	5	5	(i) = Day 1 (d) + (h)
LCR Ratio	77%										106%	(j) = Day 1 (d) / -(h)

- By any historical standard, a 40% one-day deposit runoff is unrealistic

Scenario #3: Peak Day Requirement with Steep Deposit Outflows

- By applying the U.S. LCR Peak Day requirement with a Steep deposit runoff assumption (which is conservative), the table below demonstrates that the example bank is appropriately above the minimum standards for every one of the 30 days
- With the Steep deposit runoff assumption, approximately 8% of deposits run off on the very first day, followed by another 32% runoff in the subsequent 29 days, and 40% cumulatively by Day 30

Scenario 3: U.S. LCR Rules with Peak Day Requirement & Conservative Steep Deposit Runoff

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Days 8-15	Days 16-22	Days 23-30	Cum. 30 Day	
HQLA - Cash	30										30	(a)
HQLA - UST (Post-Haircut)	40										40	(b)
HQLA - U.S. Agencies (Post-Haircut)	13										13	(c)
Total HQLA	83										83	(d) = (a) + (b) + (c)
Contractual Loan Inflows	-	-	18	-	-	-	-	13	-	-	30	(e)
Steep Deposit Runoff	(22)	(22)	(9)	(8)	(3)	(3)	(9)	(16)	(10)	(7)	(108)	(f)
Net (Outflows)/Inflows	(22)	(22)	9	(8)	(3)	(3)	(9)	(3)	(10)	(7)	(78)	(g) = (e) + (f)
Cumulative Net Outflows	(22)	(44)	(35)	(43)	(46)	(49)	(58)	(61)	(71)	(78)	(78)	(h) = Day X (g) + Day X-1 (h)
Net Surplus	61	39	47	40	37	34	24	21	11	5	5	(i) = Day 1 (d) + (h)
LCR Ratio	373%										106%	(j) = Day 1 (d) / -(h)

- A Steep runoff is an appropriately conservative deposit outflow assumption

Scenario #4: Peak Day Requirement with Straight-line Deposit Runoff

- By applying the U.S. LCR Peak Day requirement with a Straight-line deposit runoff assumption (which may be considered optimistic), the table below demonstrates that the example bank is above the minimum standards for every one of the 30 days
- With the Straight-line deposit runoff assumption, approximately 1% of deposits run off on the first day, and 40% cumulatively by Day 30

Scenario 4: Rules with Peak Day Requirement & Optimistic Straight-line Deposit Runoff

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Days 8-15	Days 16-22	Days 23-30	Cum. 30 Day	
HQLA - Cash	30										30	(a)
HQLA - UST (Post-Haircut)	40										40	(b)
HQLA - U.S. Agencies (Post-Haircut)	13										13	(c)
Total HQLA	83										83	(d) = (a) + (b) + (c)
Contractual Loan Inflows	-	-	18	-	-	-	-	13	-	-	30	(e)
Straight-line Deposit Runoff	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(29)	(25)	(29)	(108)	(f)
Net (Outflows)/Inflows	(4)	(4)	14	(4)	(4)	(4)	(4)	(16)	(25)	(29)	(78)	(g) = (e) + (f)
Cumulative Net Outflows	(4)	(7)	7	3	(1)	(4)	(8)	(24)	(49)	(78)	(78)	(h) = Day X (g) + Day X-1 (h)
Net Surplus	79	76	89	86	82	79	75	59	34	5	5	(i) = Day 1 (d) + (h)
LCR Ratio	<div style="display: flex; align-items: center; justify-content: space-between;"> 2299% ← 106% </div>										(j) = Day 1 (d) / -(h)	

- A straight-line runoff is less realistic/less conservative, so is not recommended

Deposit Outflows – What Is Realistic (But Conservative)?

Deposit Runoffs Under Different Modelling Alternatives

	<u>Day 1</u>	<u>Day 2</u>	<u>Day 3</u>	<u>Day 4</u>	<u>Day 5</u>	<u>Day 6</u>	<u>Day 7</u>	<u>Days 8-15</u>	<u>Days 16-22</u>	<u>Days 23-30</u>	<u>Cum. 30 Day</u>
Overnight Runoff <i>(U.S. LCR Rule as currently written)</i>	(108)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(108)
	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%
Steep Runoff <i>(Indicative example; other models possible)</i>	(22)	(22)	(9)	(8)	(3)	(3)	(9)	(16)	(10)	(7)	(108)
	8%	8%	3%	3%	1%	1%	3%	6%	4%	2%	40%
Straight-line Runoff <i>(Not recommended)</i>	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(29)	(25)	(29)	(108)
	1%	11%	9%	11%	40%						

Balance Sheet Supporting Scenario #5 Analysis – Incremental Wholesale Borrowing

- Under the U.S. LCR rules (with Peak Day requirement and overnight deposit outflows), as was done in Scenario #2, then the example bank would be incented to comply with the rules by issuing short maturity instruments that cover the first few days/weeks
 - Specifically \$25 billion of short term wholesale funding is issued and invested in balance sheet cash

Base Balance Sheet for Scenarios 1 to 4

High Quality Liquid Assets - Cash	30
High Quality Liquid Assets - U.S. Treasuries (UST)	40
High Quality Liquid Assets - U.S. Agencies	15
Loans to Non-FI (Contractual) - 3 Day	35
Loans to Non-FI (Contractual) - 15 Day	25
Loans to Non-FI (Contractual) - 3 Year	155
Total Assets	300

Non-FI Corporate Deposits (Non-Contractual)	270
Commercial Paper - 21 Day (Contractual)	0
Capital	30
Total Liabilities & Equity	300

Adjusted Balance Sheet for Scenario 5

High Quality Liquid Assets - Cash	55
High Quality Liquid Assets - U.S. Treasuries (UST)	40
High Quality Liquid Assets - U.S. Agencies	15
Loans to Non-FI (Contractual) - 3 Day	35
Loans to Non-FI (Contractual) - 15 Day	25
Loans to Non-FI (Contractual) - 3 Year	155
Total Assets	325

Non-FI Corporate Deposits (Non-Contractual)	270
Commercial Paper - 21 Day (Contractual)	25
Capital	30
Total Liabilities & Equity	325

\$25bn CP issuance
invested in cash

Prescribed Haircut & Runoff Factors

HQLA - UST / Cash	0%
HQLA - U.S. Agencies	15%
Loans to Non-FI (Contractual)	50%
Non-FI Corporate Deposits (Non-Contractual)	40%

Non-FI = Non-Financial Institution

Scenario #5: Peak Day Requirement with Overnight Deposit Runoff & Short Term Borrowing

- By applying the U.S. LCR rule set (with the Peak Day requirement and overnight deposit outflows) to a balance sheet composition that introduces incremental borrowings, the below table demonstrates that the example bank would be able to comply with the rule set. An example bank would be incented to issue short term instruments, either CP or TD's

Scenario 5: U.S. LCR Rules with Peak Day Requirement & Overnight Deposit Runoff & Incremental Short Term Borrowings

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Days 8-15	Days 16-22	Days 23-30	Cum. 30 Day	
HQLA - Cash	55										55	(a)
HQLA - UST (Post-Haircut)	40										40	(b)
HQLA - U.S. Agencies (Post-Haircut)	13										13	(c)
Total HQLA	108										108	(d) = (a) + (b) + (c)
Contractual Loan Inflows	-	-	18	-	-	-	-	13	-	-	30	(e)
Overnight Deposit Runoff	(108)	-	-	-	-	-	-	-	-	-	(108)	(f)
Contractual CP Outflows	-	-	-	-	-	-	-	-	(25)	-	(25)	(g)
Net (Outflows)/Inflows	(108)	-	18	-	-	-	-	13	(25)	-	(103)	(h) = (e) + (f) + (g)
Cumulative Net Outflows	(108)	(108)	(91)	(91)	(91)	(91)	(91)	(78)	(103)	(103)	(103)	(i) = Day X (h) + Day X-1 (i)
Net Surplus	(0)	(0)	17	17	17	17	17	30	5	5	5	(j) = Day 1 (d) + (i)
LCR Ratio	100%										105%	(k) = Day 1 (d) / -(i)

- The U.S. LCR Peak Day requirement encourages short term borrowing to solve the overnight deposit outflow assumption by focusing the bank on its most binding constraint, which will typically be the very first day