

# Thoughts on Balance Sheet Efficiency:

4<sup>th</sup> Annual New England Banking Workshop



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- ***LCR Ramifications***
  - *Portfolio Strategies*
  - *HELOC Unfunded Commitments*
  - *FASB CECL Model*
  - *Funding Alternative: Pay Fixed Interest Rate Swaps*
  - *Unwind/Recast of Legacy Pay Fixed Swaps*
-

# Basel III Liquidity Coverage Ratio (LCR)

- **The Liquidity Coverage Ratio (LCR)** must be managed primarily by depositories with greater than \$50 billion in total assets, explicitly excluding community banks. This rule requires subject institutions to hold cash, Treasuries, GNMMAs, and certain other assets in an amount equal to certain prescribed runoff rates for deposits/liabilities/off balance sheet commitments.

## LCR Calculation:

$$\text{Liquidity Coverage Ratio} = \frac{\text{High Quality Liquid Assets (HQLA)}}{\text{Total Net Cash Outflow over Next 30 Calendar Days}}$$

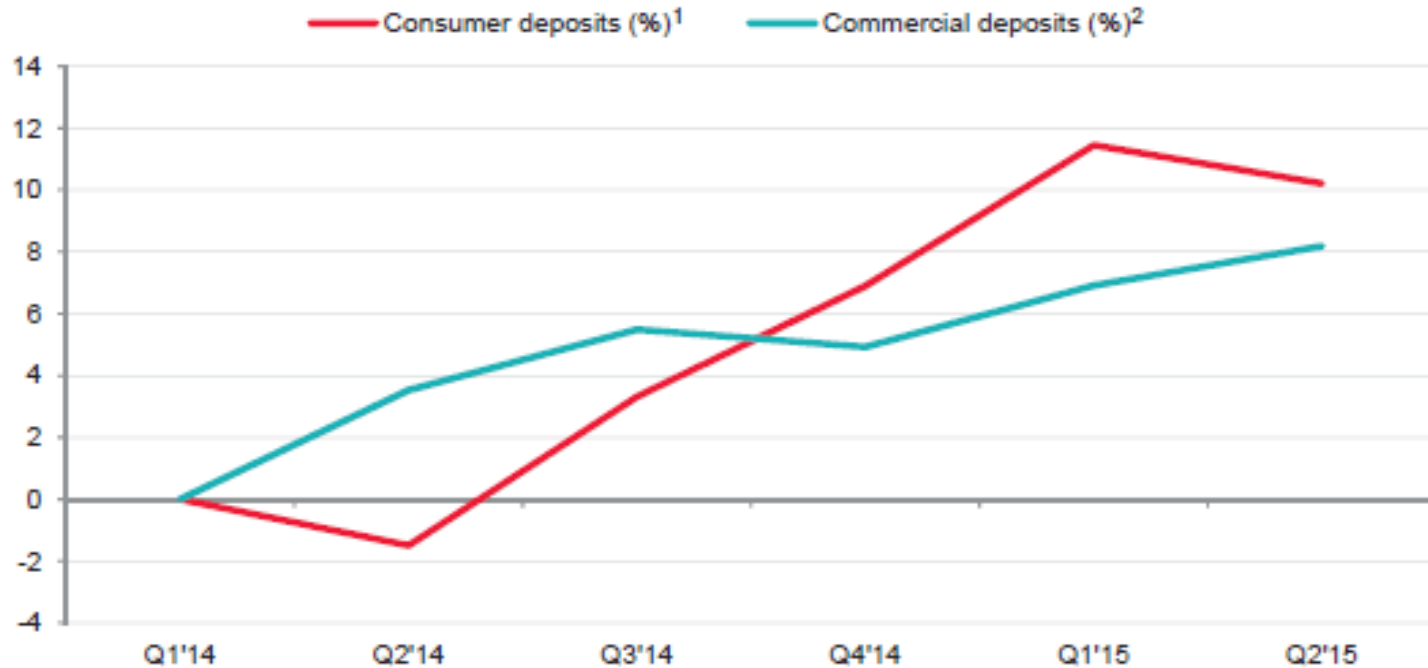
Unsecured Retail Funding*	Standard
Stable Retail Deposits entirely covered by insurance	3%
Other Retail Deposits	10%

\*Not a comprehensive list

# LCR Implications on Deposits

## Change in deposit mix among banks and thrifts, by asset size (%)\*

Assets >\$50B



Data compiled Sept. 11, 2015.

\* Represents change in aggregate consumer deposits and aggregate commercial deposits compared to the first quarter of 2014. Analysis is limited to commercial banks and savings banks with \$1 billion or more in total assets that reported regulatory filings as of June 30, 2015.

Excludes institutions that answered "no" to a call report query on offering consumer deposit accounts in any of the last six quarters.

<sup>1</sup> Represents transaction and nontransaction savings account deposit products, intended primarily for individuals for personal, household or family use.

<sup>2</sup> Represents transaction and nontransaction savings account deposit products, intended for individuals, partnerships and corporations.

Time deposits held by individuals, partnerships or corporations are excluded from the analysis.

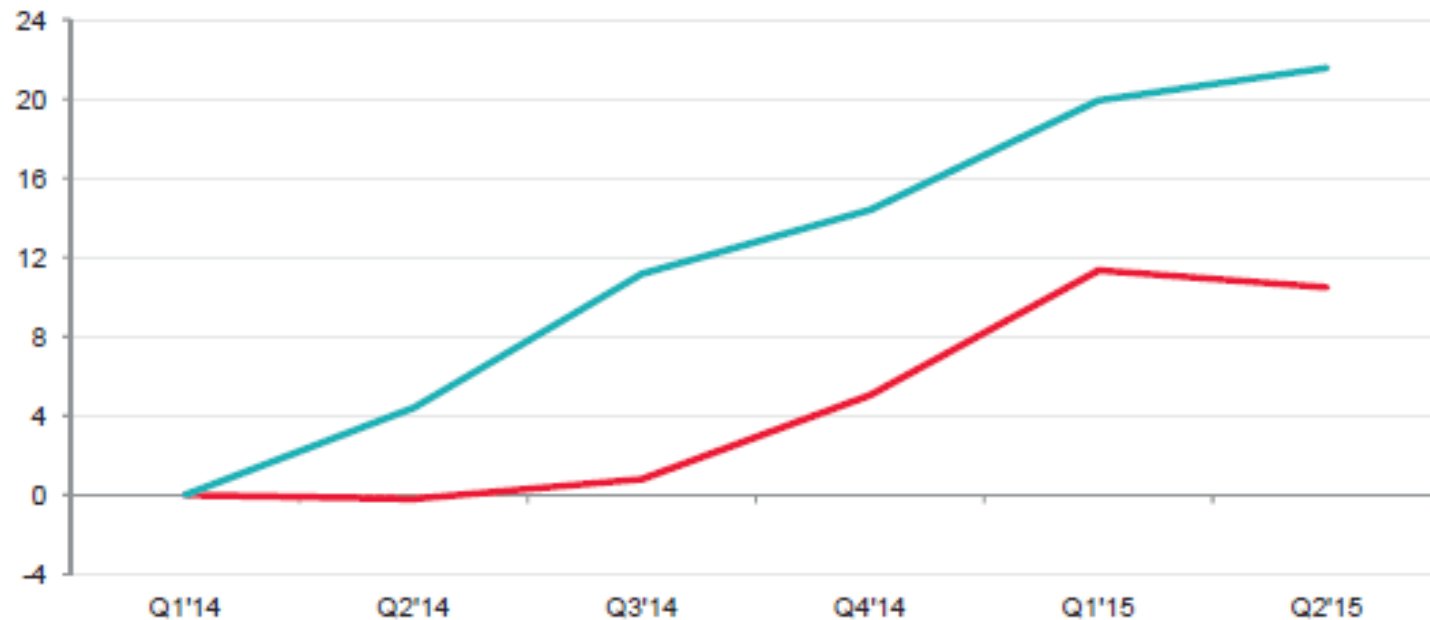
Source: SNL Financial



# LCR Implications on Deposits

## Change in deposit mix among banks and thrifts, by asset size (%)\*

Assets between \$1B-\$50B



Data compiled Sept. 11, 2015.

\* Represents change in aggregate consumer deposits and aggregate commercial deposits compared to the first quarter of 2014. Analysis is limited to commercial banks and savings banks with \$1 billion or more in total assets that reported regulatory filings as of June 30, 2015.

Excludes institutions that answered "no" to a call report query on offering consumer deposit accounts in any of the last six quarters.

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Time deposits held by individuals, partnerships or corporations are excluded from the analysis.

Source: SNL Financial



- *LCR Ramifications*
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## Improving Balance Sheet Efficiency

- Prudent portfolio management can allow you to access liquidity in the securities portfolio without sacrificing earnings or significantly changing the duration profile of the overall balance sheet.
- Most portfolios have at least some positions that are shorter, lower yielding securities that have rolled down the curve or experienced elevated prepayment speeds (high MBS, seasoned hybrid ARMs, short municipals, rolled down agencies, corporates under two years).

Description	Sector	Coupon	Par Amount	Book Price	Market Price	Market Value	Yield	Avg Life	Eff Dur	+300 bps % Chg	Book G/L (Sale Date)
<b>Sale Items:</b>											
FN MA1036	Agency MBS Pass-Through	2.50	\$455,165	102.66	102.13	\$464,860	1.32	2.5	2.20	-7.00%	-\$2,412
G2 82712	Ginnie ARM	3.00	\$159,790	105.03	102.75	\$164,184	0.78	4.5	0.86	-4.65%	-\$3,643
FHLMC 1 03/08/17	Agency Debenture	1.00	\$2,000,000	99.78	100.38	\$2,007,600	1.13	1.7	1.67	-4.87%	\$12,000
FHLMC 2 08/25/16	Agency Debenture	2.00	\$2,000,000	101.28	101.44	\$2,028,800	0.88	1.2	1.14	-3.35%	\$3,200
<b>Total Sales:</b>			<b>\$4,614,955</b>	<b>100.90</b>	<b>101.09</b>	<b>\$4,665,444</b>	<b>1.03</b>	<b>1.7</b>	<b>1.46</b>	<b>-4.41%</b>	<b>\$9,144</b>
<b>Reinvest Items:</b>											
FG G18569	Agency MBS Pass-Through	3.00	\$2,000,000	104.55	104.55	\$2,090,938	2.01	5.0	4.59	-15.34%	\$0
Cash	N/A	N/A	\$2,500,000	100.00	100.00	\$2,500,000	0.25	0.0	0.00	0.00%	\$0
<b>Total Reinvest:</b>			<b>\$4,500,000</b>	<b>102.02</b>	<b>102.02</b>	<b>\$4,590,938</b>	<b>1.03</b>	<b>2.2</b>	<b>2.04</b>	<b>-6.82%</b>	<b>\$0</b>
<b>Difference:</b>				<b>1.12</b>	<b>0.93</b>	<b>-\$74,507</b>	<b>0.00</b>	<b>0.56</b>	<b>0.58</b>	<b>-2.40%</b>	<b>\$9,144</b>

- Selling these securities and rolling back out the curve can enable you to maintain the current earnings power of the portfolio while still freeing up liquidity to direct towards loan originations.

# Deleverage and Releverage Strategy

- The Delever/Relever Strategy is one that allows for expensive liabilities to be unwound in order to take advantage of the current rate environment
  - A deleverage in which liabilities at no net loss are unwound through security sales at gains, or the use of cash, can improve profitability metrics and ALM positioning
  - Relevering with advances at lower rates can increase the spread with new assets, resulting in improvements in earnings and capital ratios



# Deleverage and Releverage Strategy

## Delever

CUSIP	Description	Book Price	Market Price	Current Par	Book Value	Market Value	Gain/Loss (7/21/15)	Book Yield	Market Yield	Effective Duration	Average Life	
	ARMs	\$99.81	\$103.58	\$12,276,576	\$12,253,793	\$12,716,621	\$462,828	2.24%	1.41%	0.90	3.07	
	CMOs Fixed	\$100.01	\$104.08	\$62,756	\$62,762	\$65,315	\$2,553	3.73%	2.27%	3.86	3.79	
	CMOs Floating	\$99.09	\$101.51	\$1,984,962	\$1,966,838	\$2,014,995	\$48,157	1.21%	0.69%	0.49	2.84	
	MBS Passthroughs	\$99.54	\$107.87	\$6,999,067	\$6,966,850	\$7,549,901	\$583,051	4.46%	2.03%	2.84	3.29	
	Municipals	\$95.13	\$101.17	\$1,033,750	\$983,382	\$1,045,843	\$62,461	6.38%	3.32%	5.79	3.22	
	Cash	\$100.00	\$100.00	\$14,016,374	\$14,016,374	\$14,016,374	\$0	0.25%	0.25%	0.00	0.00	
				<b>Total:</b>	<b>\$36,373,485</b>	<b>\$36,250,000</b>	<b>\$37,409,050</b>	<b>\$1,159,050</b>	<b>1.96%</b>	<b>1.12%</b>	<b>1.07</b>	<b>1.92</b>

Maturity	Description	Amount	*Prepay Fee (7/21/15)	Effective Rate	Average Life	
2/16/2016	Fixed Rate Advance	\$2,500,000	(\$49,868.73)	2.89%	0.48	
2/16/2016	Fixed Rate Advance	\$2,500,000	(\$49,966.01)	2.90%	0.48	
2/16/2016	Fixed Rate Advance	\$3,750,000	(\$75,520.03)	2.96%	0.48	
5/16/2016	Fixed Rate Advance	\$2,500,000	(\$70,457.61)	3.07%	0.73	
5/16/2016	Fixed Rate Advance	\$3,750,000	(\$111,715.50)	3.19%	0.73	
5/16/2016	Fixed Rate Advance	\$3,750,000	(\$110,848.83)	3.21%	0.73	
8/15/2016	Fixed Rate Advance	\$2,500,000	(\$91,383.41)	3.27%	0.98	
8/15/2016	Fixed Rate Advance	\$2,500,000	(\$95,643.81)	3.37%	0.98	
8/15/2016	Fixed Rate Advance	\$3,750,000	(\$143,558.75)	3.38%	0.98	
8/15/2016	Fixed Rate Advance	\$2,500,000	(\$100,013.53)	3.48%	0.98	
8/15/2016	Fixed Rate Advance	\$3,750,000	(\$153,599.08)	3.54%	0.98	
8/15/2016	Fixed Rate Advance	\$2,500,000	(\$106,016.82)	3.63%	0.98	
		<b>Total:</b>	<b>\$36,250,000</b>	<b>(\$1,158,592)</b>	<b>3.24%</b>	<b>0.79</b>
			<b>Difference:</b>	<b>\$458</b>	<b>-1.29%</b>	<b>-1.13</b>

## Delever Results

Action	Amount	Rate	Income Impact
Sell Securities	(\$36,373,485)	1.96%	(\$59,295)
Unwind Advances	(\$36,250,000)	3.24%	\$97,974
			<b>\$38,679</b>

## Potential Reinvest

Action	Amount	Rate	Monthly Income Impact
New Liabilities	\$36,250,000	0.25%	(\$7,552)
New Assets	\$36,250,000	2.00%	\$60,417
			<b>\$52,865</b>

## Summary of Transaction

Action	Amount	Spread	Monthly Income Impact
Delever	\$36,250,000	-1.29%	\$38,679
Relever	\$36,250,000	1.75%	\$52,865
		<b>3.04%</b>	<b>\$91,543</b>

## Model Portfolio

- For a financial institution, there is no “one size fits all” portfolio
- Cash flows, interest rate risk, liquidity and other risk assessments necessitate a diversified portfolio. However, here are some general guidelines in today’s interest rate environment:

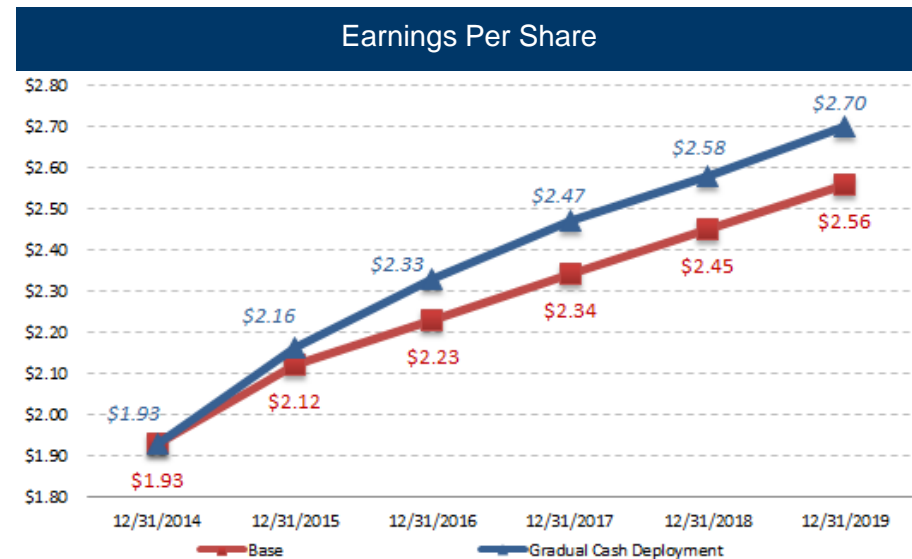
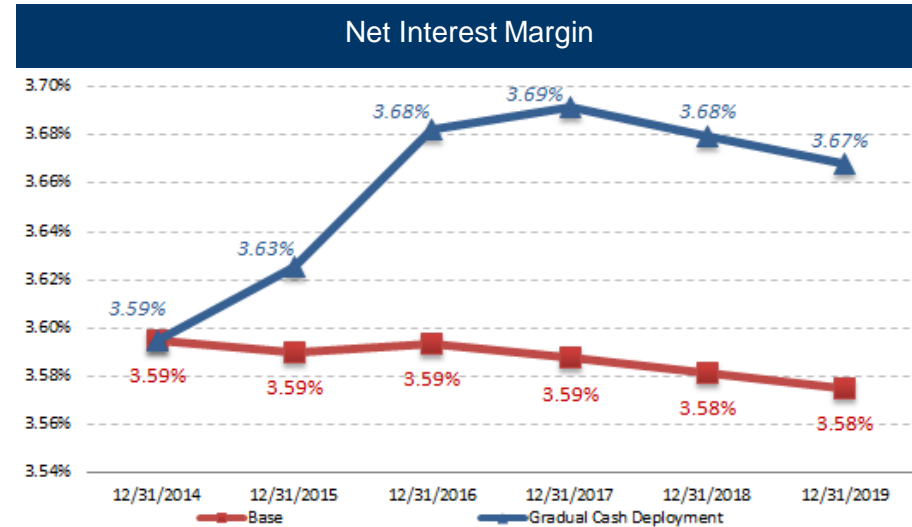
Sector	Percent of Portfolio	Current Concentrations
Agency & Treasury	10-15%	Ladder in bullet cash flows over the 1 to 3 year part of the curve paired with higher premium cushion calls/steps for outperformance in higher rates
Credit Products	10%	Favor CLOs because of wide spreads, capital efficiency and uncapped floating rate sequential structures
Agency MBS	40-50%	Minimal allocation to 10-15yr passthroughs; emphasis on 20yr MBS, hybrid ARMs, SEQ and VADM CMOs backed by non-TBA-eligible such as HLTV, modified and jumbo collateral. Consider multifamily bonds as surrogates for agency and treasury bullets.
SBA	10-15%	Mix of floaters and fixed SBICs; SBA floaters establish the efficient frontier on the short end of the curve
Municipal	20-25%	8-15yr maturity: mix of taxable, BQ, and GM determined by tax situation
Cash	1-5%	

# Quantifying Margin Opportunity Cost

- Have you quantified how much margin expansion is sitting in your cash position?

## Sample Bank

- Currently at 10% Cash/Assets
- Systematically deploy cash over the next 8 quarters, bringing the cash balance down to 5% of assets
  - Out of 0.25% yield on cash
  - Into 2.25% yield on a blend of securities and loans
- Once fully deployed at the end of 2016, this results in
  - 10bps of margin expansion
  - Over 5% EPS accretion



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-

# Case Study: Regions Financial

- Regions Financial is currently classifying its entire HELOC and Credit Card unfunded commitment balances as unconditionally cancelable and assigning a 0% credit conversion factor for risk weighting purposes.

	Reporting Period				
	2014Q2	2014Q3	2014Q4	2015Q1	2015Q2
<b>Off-Balance Sheet Items</b>					
Unused Cmt:1-4 Fam Rev Lines	6,746,252	6,660,961	6,581,171	6,568,207	6,483,105
Unused Cmt: Unused Consumer CC Lines	4,532,325	4,637,517	4,692,829	4,874,086	4,969,862
Unused Cmt: Other Unused CC Lines	524,772	531,243	542,382	551,281	564,827
Unused Commitments: Credit Card Lines	5,057,097	5,168,760	5,235,211	5,425,367	5,534,689
Unused Cmt: 1-4 Construction Ln	1,039,308	1,097,649	1,191,039	1,156,366	1,225,294
Unused Cmt: Com RE, Land & Other	4,318,813	4,443,274	4,462,095	3,810,257	4,054,187
Unused Cmt:Sec Comm RE	5,358,121	5,540,923	5,653,134	4,966,623	5,279,481
Unused Cmt:Not Sec Comm RE	354,473	349,329	346,446	370,835	427,135
Unused Cmt:Tot Comm RE Lnes	5,712,594	5,890,252	5,999,580	5,337,458	5,706,616
Unused Cmt:Secs Underwriting	0	0	0	0	0
Unused Cmt: Comm & Ind Lns	17,672,694	18,370,816	19,067,391	19,584,652	20,009,412
Unused Cmt: Loans to Finl Instn	4,250,961	4,101,729	4,070,487	4,488,231	4,290,703
Unused Cmt: All Other	2,941,948	2,893,422	2,770,599	3,237,965	3,117,267
Unused Commitments: Other Commitments	24,865,603	25,365,967	25,908,477	27,310,848	27,417,382
<b>Derivatives &amp; Off-Balance Sheet Items</b>					
NotAmt:Unused Cmt>1yr Orig Mat	25,285,963	26,189,252	26,124,783	25,794,258	26,685,033
NotAmt: Unused Cmt ABCP Conduits <= 1 Yr Orig Mat	0	0	0	NA	NA
Not Amt: Unused Cmt ABCP excl Cond<= 1 Yr Orig Mat	NA	NA	NA	6,854,048	6,438,967
NotAmt: Unconditionally Cancelable Commitments	NA	NA	NA	11,993,574	12,017,792
NotAmt: Total Unsettled Transactions	NA	NA	NA	0	0

- HELOC Unfunded Commitments + Credit Card Unfunded Commitments = Unconditionally Cancelable Commitments

## Case Study: Unfunded Commitments = Unconditionally Cancelable Commitments

- The following institutions are classifying their HELOC and Credit Card unfunded commitment balances as unconditionally cancelable and assigning a 0% credit conversion factor for risk weighting purposes.

	SunTrust Banks, Inc.	Regions Financial Corporation	Bremer Financial Corporation	First Connecticut Bancorp, Inc.	Brand Group Holdings, Inc.	Northwest Financial Corp.	National Commerce Corporation	Access National Corporation
Total Assets (\$000)	189,107,850	121,967,042	10,063,759	2,626,521	2,081,276	1,636,235	1,256,614	1,166,122
<b>Off-Balance Sheet Items</b>								
Unused Cmt:1-4 Fam Rev Lines (\$000)	10,756,456	6,483,105	356,118	180,622	21,617	74,925	71,029	21,616
Unused Cmt: Unused Consumer CC Lines (\$000)	5,445,745	4,969,862	0	0	0	0	0	0
Unused Cmt: Other Unused CC Lines (\$000)	2,076,118	564,827	0	0	0	0	0	0
Unused Commitments: Credit Card Lines (\$000)	7,521,863	5,534,689	0	0	0	0	0	0
Unused Cmt: 1-4 Construction Ln (\$000)	218,335	1,225,294	24,357	3,002	43,469	19,076	23,264	16,768
Unused Cmt: Com RE, Land & Other (\$000)	2,932,654	4,054,187	237,367	66,025	78,326	71,363	36,933	100,380
Unused Cmt:Sec Comm RE (\$000)	3,150,989	5,279,481	261,724	69,027	121,795	90,439	60,197	117,148
Unused Cmt:Not Sec Comm RE (\$000)	501,037	427,135	0	0	0	0	0	0
Unused Cmt:Tot Comm RE Lnes (\$000)	3,652,026	5,706,616	261,724	69,027	121,795	90,439	60,197	117,148
Unused Cmt:Secs Underwriting (\$000)	0	0	0	0	0	0	0	0
Unused Cmt: Comm & Ind Lns (\$000)	55,794,492	20,009,412	1,037,588	228,619	63,564	144,217	81,653	193,793
Unused Cmt: Loans to Finl Instn (\$000)	319,853	4,290,703	0	0	0	0	0	0
Unused Cmt: All Other (\$000)	5,395,034	3,117,267	409,124	50,813	6,564	87,278	7,033	7,765
Unused Commitments: Other Commitments (\$000)	61,509,379	27,417,382	1,446,712	279,432	70,128	231,495	88,686	201,558
<b>Derivatives &amp; Off-Balance Sheet Items</b>								
NotAmt:Unused Cmt>1yr Orig Mat (\$000)	54,841,236	26,685,033	831,489	29,394	147,412	175,821	117,631	0
NotAmt: Unused Cmt ABCP Conduits <= 1 Yr Orig Mat (historical) (\$000)	NA	NA	NA	NA	NA	NA	NA	NA
Not Amt: Unused Cmt ABCP excl Cond<= 1 Yr Orig Mat (\$000)	10,321,721	6,438,967	871,702	319,065	44,511	135,185	0	314,210
NotAmt: Unconditionally Cancelable Commitments (\$000)	18,278,319	12,017,792	356,118	180,622	21,617	74,925	71,029	21,616
NotAmt: Total Unsettled Transactions (\$000)	0	0	0	0	0	0	0	0

# Credit Conversion Factors on HELOC Unfunded Commitments

## Call Report definition of “unconditionally cancelable”

- The definition of “unconditionally cancelable” as it pertains to assigning credit conversion factors (CCFs) on unfunded commitments has certain caveats for consumer products written into the RC-R call report instructions:

“In the case of consumer home equity or mortgage lines of credit secured by liens on 1-4 family residential properties, a bank is deemed able to unconditionally cancel the commitment if, at its option, it can prohibit additional extensions of credit, reduce the credit line, and terminate the commitment **to the full extent permitted by relevant federal law.**”

## Regulatory clarity provided:

- This excerpt “to the full extent permitted by relevant federal law” is a reference to the situations permitted by Reg Z that one can cancel a HELOC
- Our FDIC contacts responded to our requests for clarity as follows:
  - “Generally speaking, if the HELOC contract follows Reg Z, *and does not add any additional conditions*, that is goes beyond the extent permitted by Federal or applicable State law (basically, bank-directed additional conditions), then it would fall in line with the definition of unconditionally cancelable.”
- As a result, one would achieve the HELOC definition of unconditionally cancelable and can apply a CCF of 0% to these contracts assuming the contracts have the Reg Z language

## [Sample Bank]: HC-L and HC-R Classification of HELOCs

- Currently, [Sample Bank] may not be classifying its HELOC balance as unconditionally cancelable and is potentially assigning a 50% credit conversion factor for risk weighting purposes. Under the assumptions that the bank's HELOC unfunded commitments are currently assigned a 50% credit conversion factor for risk weighting purposes and its existing HELOC disclosures currently include only the Reg Z conditions detailed in the appendix of this presentation (see sample disclosure on slide 4), **\$22.2mm can be deducted from risk-weighted assets** by classifying this balance as unconditionally cancellable with a 0% credit conversion factor.

	Reporting Period				
	2014Q2	2014Q3	2014Q4	2015Q1	2015Q2
<b>Off-Balance Sheet Items</b>					
Unused Cmt:1-4 Fam Rev Lines	42,700	40,274	42,189	44,292	44,414
Unused Cmt: Unused Consumer CC Lines	0	0	0	0	0
Unused Cmt: Other Unused CC Lines	0	0	0	0	0
Unused Commitments: Credit Card Lines	0	0	0	0	0
Unused Cmt: 1-4 Construction Ln	837	2,278	2,655	2,282	8,485
Unused Cmt: Com RE, Land & Other	12,798	12,160	16,716	15,304	11,223
Unused Cmt:Sec Comm RE	13,635	14,438	19,371	17,586	19,708
Unused Cmt:Not Sec Comm RE	7,552	1,792	673	885	866
Unused Cmt:Tot Comm RE Lnes	21,187	16,230	20,044	18,471	20,574
Unused Cmt:Secs Underwriting	0	0	0	0	0
Unused Cmt: Comm & Ind Lns	64,088	74,592	66,931	76,970	64,226
Unused Cmt: Loans to Finl Instn	0	0	0	0	0
Unused Cmt: All Other	42,087	41,534	41,855	44,278	41,690
Unused Commitments: Other Commitments	106,175	116,126	108,786	121,248	105,916
<b>Derivatives &amp; Off-Balance Sheet Items</b>					
NotAmt:Unused Cmt>1yr Orig Mat	25,124	29,298	29,526	95,518	101,794
NotAmt: Unused Cmt ABCP Conduits <= 1 Yr Orig Mat	0	0	0	NA	NA
Not Amt: Unused Cmt ABCP excl Cond<= 1 Yr Orig Mat	NA	NA	NA	88,493	56,910
NotAmt: Unconditionally Cancelable Commitments	NA	NA	NA	0	12,200
NotAmt: Total Unsettled Transactions	NA	NA	NA	0	0



## Capital Ratio Impact

As detailed on the previous slide, a reclassification of the \$44.4mm of 1-4 family unfunded commitments as “unconditionally cancellable” (assuming only Reg Z conditions within contract) results in a decrease of risk-weighted assets by \$22.2mm<sup>(1)</sup>. This results in the following impact on Tier 1 Common Capital, Tier 1, and Total Capital ratios:

	Before Reclassification	After Reclassification	Change
Unfunded Commitment: 1-4 Family Rev. Lines	44,414	44,414	-
Unconditionally Cancelable Commitments (\$000)	12,200	56,614	44,414
Common Equity Tier 1 Capital (\$000)	82,479	82,479	-
Tier 1 Capital (\$000)	95,211	95,211	-
Total Capital (\$000)	103,286	103,286	-
Risk Weighted Assets (\$000)	644,076	621,869	(22,207)
Tier 1 Common Capital Ratio	12.81%	13.26%	0.46%
Tier 1 Ratio	14.78%	15.31%	0.53%
Total Capital Ratio	16.04%	16.61%	0.57%

# Cost of Capital Savings

The below charts detail the cost of raising Tier 1 and Tier 2 Capital across a range of scenarios to achieve the same improvement to capital ratios as reclassifying [Sample Bank]’s HELOC Unfunded Commitments will provide:

	Before Reclassification	After Reclassification	Change	Equivalent Capital Increase
Tier 1 Common Risk-Based Ratio	12.81%	13.26%	0.46%	2,945
Tier 1 Risk-Based Ratio	14.78%	15.31%	0.53%	3,400
Total Risk-Based Capital Ratio	16.04%	16.61%	0.57%	3,688

Annual Cost of Capital Savings (\$000s)	
Cost of Capital	Tier 1 Capital: 0.53%
7.00%	238
7.50%	255
8.00%	272
8.50%	289
9.00%	306
9.50%	323
10.00%	340
10.50%	357
11.00%	374
11.50%	391
12.00%	408

Annual Cost of Capital Savings (\$000s)	
Cost of Capital	Tier 2 Capital: 0.57%
5.00%	184
5.50%	203
6.00%	221
6.50%	240
7.00%	258
7.50%	277
8.00%	295
8.50%	314
9.00%	332
9.50%	350
10.00%	369

## Additional Assets: Room for Growth

The below table details the amount of additional asset growth and income potential made possible by the HELOCs Unfunded Commitment reclassification while maintaining the Bank's current capital ratios.

	Before Reclassification	After Reclassification	Additional Asset Growth		
			20% RWA	50% RWA	100% RWA
Additional Asset Growth	-		111,035	44,414	22,207
Increase to Risk Weighted Assets	-	(22,207)	22,207	22,207	22,207
Total Risk Weighted Assets	644,076	621,869	644,076	644,076	644,076
Tier 1 Common Capital Ratio:	12.81%	13.26%	12.81%	12.81%	12.81%
Tier 1 Ratio	14.78%	15.31%	14.78%	14.78%	14.78%
Total Capital Ratio	16.04%	16.61%	16.04%	16.04%	16.04%

Spread on Leverage	Pre-Tax Income Potential from Additional Asset Growth		
	20% RWA Growth + 111,035	50% RWA Growth + 44,414	100% RWA Growth + 22,207
0.60%	666	266	133
0.70%	777	311	155
0.80%	888	355	178
0.90%	999	400	200
1.00%	1,110	444	222
1.10%	1,221	489	244
1.20%	1,332	533	266
1.30%	1,443	577	289
1.40%	1,554	622	311
1.50%	1,666	666	333
1.60%	1,777	711	355
1.70%	1,888	755	378
1.80%	1,999	799	400
1.90%	2,110	844	422
2.00%	2,221	888	444



- *LCR Ramifications*
  - *Portfolio Strategies*
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  - ***FASB CECL Model***
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  - *Unwind/Recast of Legacy Pay Fixed Swaps*
-

# FASB CECL Model

- FASB is expected to issue a final standard around its Current Expected Credit Losses (CECL) Model in 2015
- Part of the scope of the CECL final standard is that it will apply to all financial assets measured at amortized cost, which includes debt securities classified as HTM, whereas previously these instruments were evaluated using the Other Than Temporary Impairment (OTTI) Model
- The CECL Model aligns the accounting treatment of debt securities classified as HTM even more closely with loan receivables, by creating an allowance against expected losses that begins on day one, in contrast to waiting for a probable loss to occur before any write down would be taken

From *Crowe Horwath: FASB's CECL Model: Navigating the Changes*

## Inputs (Expected Credit Loss Drivers and Expected Life)

For financial assets measured at amortized cost, a current estimate of all contractual cash flows not expected to be collected should be recorded as an allowance for expected credit losses. Entities should consider "past events, current conditions, and reasonable and supportable forecasts when developing their estimate of contractual cash flows over the life of a related financial asset." Entities also should consider "relevant quantitative and qualitative factors" that exist in their business environment and similar factors that relate to their borrowers (underwriting standards, for example).<sup>10</sup>

# FASB CECL Model

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- Once the CECL Model is implemented, there will be a one time “catch-up” accounting event that accelerates the expected losses and builds the ALLL account to the appropriate level under the new standard
- 

From BankDirector.com: *New Accounting for Credit Impairment and Equity Securities: What You Need to Know*

## “What About Transition?”

Once the standard is adopted, there will be a cumulative-effect adjustment to the balance sheet (credit allowance, debit retained earnings). For debt securities with recognized impairment, previous write-downs are not reversed. For PCI [purchased credit impaired] assets, an allowance is established with an offset to cost basis.

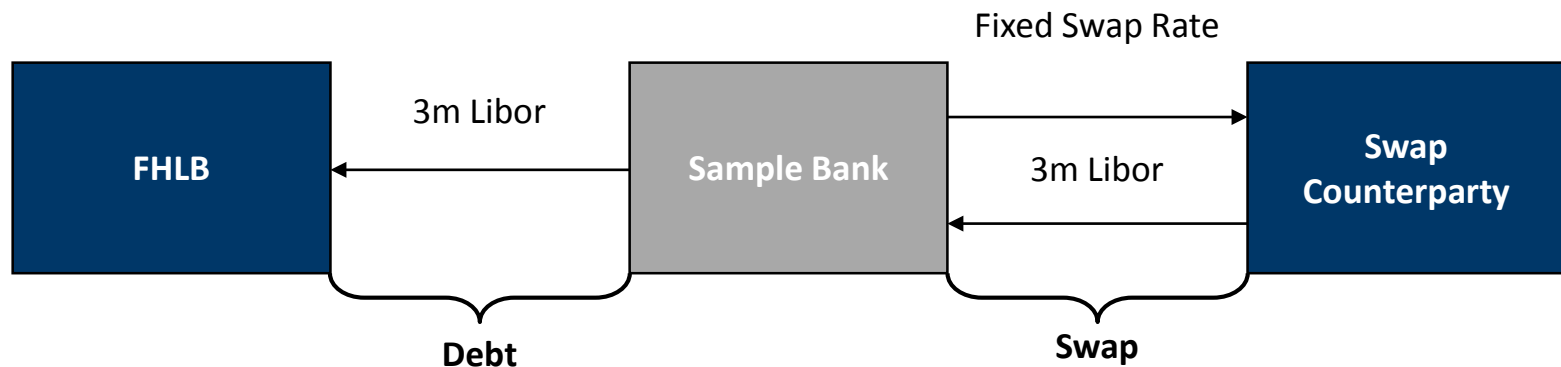
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- Also of note, there has been no mention of any relief provided in connection with this cumulative-effect adjustment to break HTM without risking tainting the use of the designation going forward

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-

# Pay Fixed Interest Rate Swaps

- A pay fixed interest rate swap is an effective hedge to guard against rising interest rates
- This instrument is effectively a fixed rate borrowing, where the changes in market value of the swap move in the opposite direction of fixed rate securities and are recorded in Other Comprehensive Income (OCI), not earnings
  - Opportunity for utilization depends on structure and presence of existing wholesale funding book (e.g., FHLB advances, brokered CDs, etc.) and composition of retail funding base)
  - Compared to other solution for rates up protection (Held-to-Maturity designation and longer term fixed rate funding), this provides realizable gain in rates up and limits future balance sheet encumbrance)





# Hedge Accounting Application

- Cash Flow Hedge of “Forecasted Transaction”
  - Paragraph 29 FAS 133
  - ASC 815-20-25-15
- Cash flows hedged must be deemed “probable” – cash flows do not have to exist during deferral period, only once accruals begin on the swap
- Mark-to-market within Other Comprehensive Income (OCI) ->
  - Ability to offset risk to Tangible Common Equity (post-tax) and Economic Value of Equity (pre-tax) in rising rate environments

## Cost Comparison: Swaps vs. FHLB Borrowings

- The grid below illustrates the relative cost savings of using pay-fixed interest rate swaps as a replacement for regular fixed rate FHLB advances from FHLB Chicago
- As shown below, the savings increases with the increase in the “term premium” charged by the FHLB with 49.2 bps of savings at the 7 year point.

### Swap Details

	FHLB Chicago Fixed Rate Advance	Pay Fixed Interest Rate Swap*	ARC Spread**	Total Borrowing Cost (Swap + Spread)	Cost Savings
4Y	1.38%	1.163%	-0.02%	1.143%	23.7
5Y	1.58%	1.347%	-0.02%	1.327%	25.3
6Y	1.85%	1.514%	-0.02%	1.494%	35.6
7Y	2.13%	1.658%	-0.02%	1.638%	49.2

\*Indicative levels as of 10/2/15

\*\*Using 6 month ARC given lowest cost for 3 Mo LIBOR indexed funding

# Practical Application/Potential Swap Structures

- A deferred-starting interest rate swap offers the following benefits vs. a spot-starting swap:
  - **No near term margin compression with deferred start** – utilize the accommodative Fed during the swap deferral period (floating rate period)
  - Future fixed borrowing rate is **based off of today’s forward curve**
  - Flexibility to increase funding as needed, rather than immediately growing the balance sheet (**cash flows hedged must be deemed “probable” – they do not have to exist during the deferral period, only once accruals begin on the swap**)
- In order to stagger deferral periods and ladder respective maturities, we divided the strategy into 3 individual swap structures (“buckets”):

## Swap Details

Bucket	Notional	Structure	Final Maturity	Fixed Rate	ARC Spread	Total Borrowing Cost (Swap + Spread)
1	\$50,000,000	In 1 for 4	5Y	1.559%	-0.02%	1.539%
2	\$50,000,000	In 2 for 5	7Y	2.042%	-0.02%	2.022%
3	\$50,000,000	In 3 for 7	10Y	2.435%	-0.02%	2.415%

\*Indicative levels as of 10/2/15

# Market Value and TCE Impact Illustration

**\$150mm  
deferred pay  
fixed swaps  
(Immediate Shock)  
(\$000s)**

	Down 100	Level	Up 100	Up 200	Up 300
Change in Market Value	(8,580)	0	7,853	15,706	23,558
Unrealized G/L (post tax) <sup>1</sup>	(5,663)	0	5,183	10,366	15,548
Change in TCE Position (Swaps Only)	(5,663)	0	5,183	10,366	15,548

- The \$150mm of deferred starting pay-fixed interest rate swaps provide the ability to offset a portion of the AFS investment portfolio's risk to TCE in an up rate scenario

# Roll Down Impact/Worst Case Scenario

## Worst Case Scenario

- Scenario defined
  - Short term rates do not rise
  - 10Y Treasury remains at historically low levels (below 2.25%)
- Impact on financials due to scenario
  - Interest expense will be higher relative to overnight borrowing cost (assuming short-end of the curve also stays anchored)
  - Mark-to-market on the swap strategy is negative, thereby reducing Tangible Common Equity
  - ***Offsetting these two negatives would be the fact that the unrealized gain on the investment portfolio has increased due to maturity roll-down of the investments, thereby increasing Tangible Common Equity***

## Roll Down Illustration: 1 Year Horizon

	Down 100	Level	Up 100	Up 200	Up 300
Change in Market Value: <i>Immediate</i>	(8,580)	0	7,853	15,706	23,558
Change in Market Value: <i>1 Year Horizon</i>	(10,739)	(2,256)	5,565	12,784	19,454

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-

## Executive Summary

- [Sample Bank]'s interest rate swaps have performed as designed, providing book value protection without the interest expense that would have occurred with fixed rate borrowings.
- However, one swap recently entered the fixed rate accrual period and the other is quickly approaching:

	Amount	Effective Date	Maturity Date	Fixed Rate	Variable Structure	Fixed Period Interest Cost
<b>Swap 1</b>	\$25,000,000	June 8, 2015	June 8, 2020	2.46%	3-Month LIBOR	<b>\$615,000</b>
<b>Swap 2</b>	\$25,000,000	March 7, 2016	March 7, 2021	3.00%	3-Month LIBOR	<b>\$750,000</b>
<b>Total</b>	\$50,000,000			2.74%		<b>\$1,365,000</b>

- Given an already asset sensitive profile, the fixed rate accruals add even more asset sensitivity at the expense of current income. Recasting the swap deferral periods will allow for continued (likely enhanced) tangible book value protection to a steepening yield curve without significantly elevating current interest expense.
  - The flexibility of hedge accounting enables the bank to recast the current swaps without any realized gain or loss.
- Additionally, with the flattening on the long end of the curve, an opportunity has emerged to not only mitigate the dilutive impact of the upcoming accruals but potentially:
  - Achieve more book value protection against rising interest rates (with similar accrual rates)
  - Achieve the same book value protection at a reduced interest expense

# Swap Recast Considerations: Curve Flattening

- The flattening on the 5-10yr part of the curve has resulted in minimal increases in rates for longer accrual structures. For example, the 'in 2 for 10' structure provides 5 additional years of duration for only 27 bps of extra cost vs. 'in 2 for 5' structure. Compare this to June 2013 when this difference was 70 bps.
- This this can also potentially allow for using longer duration structures at lesser notional to replicate the existing duration protection.
- Note that while providing the same TCE/EVE protection, the fractional recast would result in leaving the balance of the funding unhedged and subject to increases in its cost upon a rise in interest rates.
  - While annual interest expense is reduced, the fractional recast creates added NII risk for the additional \$20mm of unhedged floating funding. However, the asset sensitive NII profile provides the flexibility to absorb this added liability sensitivity.

## Swap Rates Historical Comparison:

Today			June 11, 2013		
Deferral Period					
Tenors	2YR	3YR	Tenors	2YR	3YR
3Yr	2.37%	2.66%	3Yr	1.83%	2.55%
4Yr	2.50%	2.75%	4Yr	2.22%	2.77%
5Yr	2.60%	2.82%	5Yr	2.46%	2.94%
8Yr	2.79%	2.94%	8Yr	2.95%	3.31%
9Yr	2.83%	2.97%	9Yr	3.06%	3.40%
10Yr	2.87%	2.99%	10Yr	3.16%	3.46%

## Deferred Swap Structure Comparison:

	Notional	Rate	MV Protection (Up 200 bps)	Annual Interest Expense
In 2 for 5	\$50,000,000	2.60%	\$4.2mm	\$1,300,000
In 2 for 9	\$30,000,000	2.83%	\$4.2mm	\$849,000
	<b>(\$20,000,000)</b>			<b>(\$451,000)</b>



## Recast Option Comparison

- As illustrated in the comparison below, Option 2 (Fractional Recast) provides the ability to achieve roughly the same amount of EVE/TCE protection while reducing total annual expense (interest expense + unwind amortization) by over \$400k when compared to Option 1 (Same Notional):

Existing Swaps							
Accrual Start Date	Maturity Date	Notional	Rate	MV Protection (up 200 shock)	Annual Interest Expense	Annual Unwind Amortization	Total Annual Expense
6/8/2015	6/8/2020	\$25,000,000	2.46%	\$2,342,672	\$615,000		
3/7/2016	3/7/2021	\$25,000,000	3.00%	\$2,440,985	\$750,000		
		<b>\$50,000,000</b>		<b>\$4,783,657</b>	<b>\$1,365,000</b>		<b>\$1,365,000</b>

Unwind/Recast Option 1 (Same Notional)							
Accrual Start Date	Maturity Date	Notional	Rate	MV Protection (up 200 shock)	Annual Interest Expense	Annual Unwind Amortization	Total Annual Expense
8/1/2017	8/1/2022	\$25,000,000	2.60%	\$2,237,903	\$650,000		
11/1/2017	11/1/2022	\$25,000,000	2.65%	\$2,215,769	\$662,500		
		<b>\$50,000,000</b>		<b>\$4,453,672</b>	<b>\$1,312,500</b>	<b>\$455,378</b>	<b>\$1,767,878</b>

Unwind/Recast Option 2 (Fractional Recast)							
Accrual Start Date	Maturity Date	Notional	Rate	MV Protection (up 200 shock)	Annual Interest Expense	Annual Unwind Amortization	Total Annual Expense
8/1/2017	8/1/2025	\$15,000,000	2.79%	\$1,977,730	\$418,500		
11/1/2017	11/1/2027	\$15,000,000	2.90%	\$2,328,737	\$435,000		
		<b>\$30,000,000</b>		<b>\$4,306,468</b>	<b>\$853,500</b>	<b>\$455,378</b>	<b>\$1,308,878</b>

# Existing Swap Unwind Details

Relevant  
Accounting  
Guidance:  
**ASC**  
**815-30-40-2**

- ***If the derivative instrument is terminated, the net gain or loss shall remain in other comprehensive income and be reclassified into earnings in the same period or periods which the hedged forecasted transaction affects earnings.***
- This guidance provides flexibility to manage future earnings impact with no impact to current margin. As stated in the codification above, if the swaps are unwound prior to accrual start date, amortization/accretion of gain/loss would not begin until accrual start date.

Accrual and  
Margin Impact

**~4 bps of NIM**  
**accretion**

	Swap 1	Swap 2	Total
Notional	\$25,000,000	\$25,000,000	<b>\$50,000,000</b>
Swap Accrual	<b>2.46%</b>	<b>3.00%</b>	
Accrual Start Date	<b>6/8/2015</b>	<b>3/7/2016</b>	
Accrual End Date	6/8/2020	3/7/2021	
Gain/Loss	(\$991,530)	(\$1,260,863)	<b>(\$2,252,393)</b>
Amortization/Accretion Term (yrs)	4.88	5.00	
Annual Amortization/Accretion	(\$203,205)	(\$252,173)	<b>(\$455,378)</b>
Annual Funding Cost Impact	<b>0.81%</b>	<b>1.01%</b>	
Funding Cost Post Unwind*	1.10%	1.30%	
Savings vs. Swap Accrual	1.36%	1.70%	
Annual \$ Savings vs. Swap Accrual	<b>\$339,295</b>	<b>\$425,577</b>	<b>\$764,872</b>
<b>Annualized Margin Impact</b>	<b>0.02%</b>	<b>0.02%</b>	<b>0.04%</b>

\*inclusive of 3 Mo LIBOR (0.29%)

# Recast Considerations: Accounting Guidance

- In order to replicate the EVE protection provided by the existing deferred swaps, various iterations (e.g., identical duration or increased duration protection) of a 'recast' strategy of the \$30mm in swaps into new structures should be considered.
- Furthermore, the accounting codifications provide the ability to re-hedge the same hedged item that was hedged by the existing swaps. This allows for one to implement new hedges without grossing up the balance sheet with new hedgeable items.

Relevant  
Accounting  
Guidance:  
ASC  
815-30-40-3

- *An entity may elect to designate prospectively a new hedging relationship with a different hedging instrument or, in the circumstances described in paragraph 815-30-40-1(a) and 815-30-40-1(c), a different hedged transaction or a hedged item if the hedging relationship meets the applicable criteria for a cash flow hedge or fair value hedge.*

PwC  
Commentary:  
Discontinuance

- *An entity, however, may establish a new hedging relationship prospectively that involves either the same or a new derivative, or the same or a new hedged item, as long as the new hedging relationship satisfies the qualifying criteria for hedge accounting.<sup>1</sup>*

## NII Profile Before and After Unwind

- The grid to the right adds the effects of the unwind and recast of swap 1 to the current 1 year NII profile (on an annualized basis reflecting accruals in each scenario).
- Given the asset sensitive profile to the right, the cost of the fixed rate accrual protection of the existing swaps may be unnecessary. Protecting TCE is likely most critical and the same TCE protection can be achieved with re-casted deferral periods.
- Note that the post-recast NII profile would be identical to the post-unwind NII profile until the end of the deferral period of the new swaps.
- Since the new swaps would be constructed to replicate the duration of the existing swaps, the EVE profile would be unchanged before/after.

Immediate Shock	Current NII		Post-Unwind NII	
	Value	Yield	Value	Yield
<b>+300</b>	97,744	13.0%	97,333	12.1%
<b>+200</b>	94,397	9.2%	94,236	8.6%
<b>+100</b>	90,496	4.7%	90,585	4.4%
<b>Base</b>	86,468	-	86,807	-
<b>-100</b>	82,052	(5.1%)	82,667	(4.8%)
<b>-200</b>	81,559	(5.7%)	82,174	(5.3%)
<b>-300</b>	81,696	(5.5%)	82,311	(5.2%)

### Note:

*Swap 2 unwind impact is not illustrated above because accrual of swap 2 would not begin until March 2016 (outside of Year 1 NII horizon)*

# *Appendix*

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- (1) Please refer to the last page of this report for Stifel Fixed Income Capital Markets disclosures
- (2) For distribution to institutional clients only

## Why is Standard HELOC Disclosure Language Unconditionally Cancelable?

**POSSIBLE ACTIONS.** Under this Plan, we have the following rights:

**Termination and Acceleration.** We can terminate the Plan and require you to pay us the entire outstanding balance in one payment, and charge you certain fees, if any of the following happens:

- (a) You commit fraud or make a material misrepresentation at any time in connection with the Plan. This can include, for example, a false statement about your income, assets, liabilities, or any other aspect of your financial condition.
- (b) You do not meet the repayment terms of the Plan.
- (c) Your action or inaction adversely affects the collateral for the Plan or our rights in the collateral. This can include, for example, failure to maintain required insurance, waste or destructive use of the dwelling, failure to pay taxes, death of all persons liable on the account, transfer of title or sale of the dwelling, creation of a senior lien on the dwelling without our permission, foreclosure by the holder of another lien or the use of funds or the dwelling for prohibited purposes.

**Suspension or Reduction.** In addition to any other rights we may have, we can suspend additional extensions of credit or reduce your credit limit during any period in which any of the following are in effect:

- (a) The value of your dwelling declines significantly below the dwelling's appraised value for purposes of the Plan. This includes, for example, a decline such that the initial difference between the credit limit and the available equity is reduced by fifty percent and may include a smaller decline depending on the individual circumstances.
- (b) We reasonably believe that you will be unable to fulfill your payment obligations under the Plan due to a material change in your financial circumstances.
- (c) You are in default under any material obligation of the Plan. We consider all of your obligations to be material. Categories of material obligations include, but are not limited to, the events described above under Termination and Acceleration, obligations to pay fees and charges, obligations and limitations on the receipt of credit advances, obligations concerning maintenance or use of the dwelling or proceeds, obligations to pay and perform the terms of any other deed of trust, mortgage or lease of the dwelling, obligations to notify us and to provide documents or information to us (such as updated financial information), obligations to comply with applicable laws (such as zoning restrictions).
- (d) We are precluded by government action from imposing the annual percentage rate provided for under the Plan.
- (e) The priority of our security interest is adversely affected by government action to the extent that the value of the security interest is less than 120 percent of the credit limit.
- (f) We have been notified by governmental authority that continued advances may constitute an unsafe and unsound business practice.
- (g) The maximum annual percentage rate under the Plan is reached.

**Change in Terms.** We may make changes to the terms of the Plan if you agree to the change in writing at that time, if the change will unequivocally benefit you throughout the remainder of the Plan, or if the change is insignificant (such as changes relating to our data processing systems).

# Reg Z Language: Limitations on Home Equity Plans

(f) Limitations on home equity plans. No creditor may, by contract or otherwise:

(1) Change the annual percentage rate unless:

- (i) Such change is based on an index that is not under the creditor's control; and
- (ii) Such index is available to the general public.

(2) Terminate a plan and demand repayment of the entire outstanding balance in advance of the original term (except for reverse mortgage transactions that are subject to paragraph (f)(4) of this section) unless:

- (i) There is fraud or material misrepresentation by the consumer in connection with the plan;**
- (ii) The consumer fails to meet the repayment terms of the agreement for any outstanding balance;**
- (iii) Any action or inaction by the consumer adversely affects the creditor's security for the plan, or any right of the creditor in such security; or**
- (iv) Federal law dealing with credit extended by a depository institution to its executive officers specifically requires that as a condition of the plan the credit shall become due and payable on demand, provided that the creditor includes such a provision in the initial agreement.

(3) Change any term, except that a creditor may:

- (i) Provide in the initial agreement that it may prohibit additional extensions of credit or reduce the credit limit during any period in which the maximum annual percentage rate is reached.** A creditor also may provide in the initial agreement that specified changes will occur if a specified event takes place (for example, that the annual percentage rate will increase a specified amount if the consumer leaves the creditor's employment).

# Reg Z Language: Limitations on Home Equity Plans

## (3) Change any term, except that a creditor may:

(ii) Change the index and margin used under the plan if the original index is no longer available, the new index has an historical movement substantially similar to that of the original index, and the new index and margin would have resulted in an annual percentage rate substantially similar to the rate in effect at the time the original index became unavailable.

(iii) Make a specified change if the consumer specifically agrees to it in writing at that time.

(iv) Make a change that will unequivocally benefit the consumer throughout the remainder of the plan.

(v) Make an insignificant change to terms.

(vi) Prohibit additional extensions of credit or reduce the credit limit applicable to an agreement during any period in which:

**(A) The value of the dwelling that secures the plan declines significantly below the dwelling's appraised value for purposes of the plan;**

**(B) The creditor reasonably believes that the consumer will be unable to fulfill the repayment obligations under the plan because of a material change in the consumer's financial circumstances;**

**(C) The consumer is in default of any material obligation under the agreement;**

**(D) The creditor is precluded by government action from imposing the annual percentage rate provided for in the agreement;**

**(E) The priority of the creditor's security interest is adversely affected by government action to the extent that the value of the security interest is less than 120 percent of the credit line; or**

**(F) The creditor is notified by its regulatory agency that continued advances constitute an unsafe and unsound practice.**



# Disclosures

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