

Impact of Final Basel III Capital Ratios on U.S. Banking Organizations

*Simpler and Less Volatile Capital Calculations –
Will Impact Capital Planning, M&A and Investment Strategy*

Thomas W. Killian, Principal
(212) 466-7709
tkillian@sandleroneill.com

After receiving more than 2,500 comment letters from U.S. banks and other interested parties, raising over 400 different concerns, the Office of the Comptroller of the Currency (OCC), the Board of Governors of the Federal Reserve System (Fed), and the Federal Deposit Insurance Corporation (FDIC),¹ delayed the implementation date of the Basel III capital rules for all U.S. banking organizations not subject to the advanced approaches capital rules² from January 1, 2013 to January 1, 2015. Reacting to the objections raised in the comment letters, the Basel III capital rules have now been simplified and the volatility of capital calculations reduced for most banks by (i) reverting back to current capital rules for the risk weighting of single family residential mortgages, (ii) providing for the opt-out of Accumulated Other Comprehensive Income (AOCI) adjustments for available-for-sale debt securities (AFS) for all banks not subject to advanced approaches capital rules, and (iii) providing clarity in certain definitions of capital rules.

Based on our review of the 997-page final Basel III capital rules released by the OCC and Fed on July 2nd and the FDIC's 959-page interim final capital rules released on July 9th, along with related regulation from the Dodd-Frank Act (DFA), we expect to see broad areas of change in capital planning, M&A strategy and investment strategy by U.S. banking organizations as they prepare for the implementation of these rules in 18 months.

¹ As part of this effort, Sandler O'Neill contributed two comment letters addressing 11 key concerns. Please see the attached link for copies of these letters: <http://www.sandleroneill.com/Collateral/Documents/English-US/SOP%20Basel%20III%20comment%20letter.pdf> and <http://www.sandleroneill.com/Collateral/Documents/English-US/SOP%20Basel%20Letter1.pdf>

² An advanced approaches banking organization is one that has total assets of \$250 billion or more or foreign asset exposure of \$10 billion or more (or elects with approval from its primary federal regulator to use the advanced approaches methodology to calculate risk weights).

CAPITAL PLANNING OVERVIEW

The final rules, along with related DFA requirements, will require U.S. bank holding companies and their related banks (banking organizations) to consider these three issues as they undertake their capital planning.

- ***Higher TCE Requirements:*** Banking organizations will be required to hold higher absolute levels of capital and higher quality of capital with greater emphasis on tangible common equity;
- ***Buffer Above Well Capitalized Requirements:*** Banking organizations may choose to hold substantial excess capital over Basel III well capitalized levels to avoid limitations on capital distributions or restricted payments; and
- ***Accelerated Timing to Meet Well Capitalized Requirements:*** Banking organizations must meet the FDIC's Prompt Corrective Action (PCA) capital ratios beginning in January 1, 2015 (when they are fully phased-in) rather than January 1, 2019 (when the Basel III ratios are fully phased-in) which will accelerate the timeline to capital compliance.

M&A OVERVIEW

In addition to these capital planning concerns, we expect the implementation of Basel III and the FDIC's PCA capital rules, along with related DFA requirements, will raise three considerations for M&A planning and strategy for U.S. banking organizations.

- ***Asset Size-Based Considerations:*** Differences in capital requirements, the level of regulatory review and the resultant prospect for higher compliance costs, all based on total asset size, will cause bank buyers to pause and carefully evaluate the strategic and financial benefits of a transaction if, after the transaction, the company would exceed key asset thresholds of \$500 million, \$10 billion, \$15 billion, \$50 billion or \$250 billion in total assets;
- ***Pre-Acquisition Survivor Planning for AOCI and Risk Weighting:*** Bank buyers will be required to do pre-acquisition survivor planning to "opt out" or "opt in" for AOCI and to select either the Simplified Statistical Formula Approach (SSFA) or Gross Up method³ to determine the risk weighting of investments in non-agency securitizations; and

³ Banking organizations not subject to the advanced approaches rules or market risk rules may utilize two methods to calculate the risk weighting for non-agency securitized assets: the simplified statistical formula approach (SSFA) or the gross-up approach. The gross up approach assigns risk-weighted asset amounts based on the full amount of the credit-enhanced assets for which the banking organization directly or indirectly assumes credit risk. To calculate risk-weighted assets under the gross-up approach, a banking organization determines four inputs: the pro rata share, the exposure amount, the enhanced amount, and the applicable risk weight. The pro rata share is the par value of the banking organization's exposure as a percentage of the par value of the tranche in which the securitization exposure resides. The enhanced amount is the par value of all the tranches that are more senior

- ***Divestiture of Non-Strategic Assets and Business Lines:*** Banking organizations (particularly global SIFIs) will consider whether to seek relief from capital deductions or higher risk weightings that penalize financial returns and require increased capital by divesting non-strategic assets or lines of business.

LOAN AND INVESTMENT STRATEGIES OVERVIEW

We also anticipate that investment and lending strategies will be refined. Banks should seek to take advantage of the AOCI “opt out” opportunity, utilize hedging strategies to protect tangible common equity, invest in non-agency securitizations to optimize returns on risk weighted assets, increase net interest income by retaining higher yielding 1–4 family residential, first lien and second lien mortgage loans, and re-price high volatility commercial real estate (HVCRE) loans to account for the increase to 150% in risk weighting for such loans.

Another factor that could have a major impact on investment strategy is the potential application of the Volcker Rule to bank investments in covered funds that would be subject to the Investment Company Act (certain exemptions are discussed in more detail later in this report).

SUMMARY OF CAPITAL RULES

With the release of the OCC and Fed final capital rules on July 2nd and assuming the Supplementary Leverage Ratio⁴ is adopted as proposed by the FDIC on July 9th, U.S. banking organizations now have a Basel III and PCA capital framework that is substantially complete⁵. The final and interim final capital rules are summarized on the next page:

to the tranche in which the exposure resides. The applicable risk weight is the weighted-average risk weight of the underlying exposures in the securitization as calculated under the standardized approach. The SSFA is a formula that starts with a baseline derived from the capital requirements that apply to all exposures underlying the securitization and then assigns weights based on the subordination level of an exposure. The regulatory agencies designed the SSFA to apply relatively higher capital requirements to the more risk junior tranches of a securitization that are the first to absorb losses and relatively lower requirements to the senior exposures. For more details on the calculation of the SSFA formula, please refer to Appendix D. As noted above, in all cases, the minimum risk weight for securitization exposures is 20 percent and the maximum risk weighting is 1,250 percent.

⁴ The Supplementary Leverage Ratio is the simple arithmetic mean of the ratio of an advanced approaches bank’s tier 1 capital to total leverage exposure calculated as of the last day of each month in the reporting quarter. Please refer to page 560 in the Final Rules.

<http://www.federalreserve.gov/bcreg20130702a.pdf>

⁵ In addition to the Basel III requirements, the Fed has alluded to requiring additional levels of long-term debt to facilitate orderly liquidation and an additional capital surcharge for a substantial reliance on short-term wholesale funding that would be applicable to the top 8 U.S. banking organizations.

<http://www.federalreserve.gov/newsevents/press/bcreg/tarullo20130702a.htm>

Basel III and PCA Final Capital Ratios		Well Capitalized Requirement	Capital Conservation Buffer	Basel III NPR	Basel III Final Rule	FDIC PCA
Tier 1 Leverage / Avg. Assets Ratio	= $\frac{\text{CET1 + Additional Tier 1 Capital - Regulatory Adjustments}}{\text{Average On-Balance Sheet Assets}}$	N/A	N/A	4.00%	4.00%	5.00%
Common Equity / RWA Ratio	= $\frac{\text{Common Equity - Regulatory Adjustments}}{\text{Risk-Weighted Assets}}$	4.50%	+ 2.50%	= 7.00%	7.00%	6.50%
Tier 1 Leverage / RWA Ratio	= $\frac{\text{CET1 + Additional Tier 1 Capital - Regulatory Adjustments}}{\text{Risk-Weighted Assets}}$	6.00%	+ 2.50%	= 8.50%	8.50%	8.00%
Total Capital / RWA Ratio	= $\frac{\text{CET1 + Additional Tier 1 Capital + Tier 2 Capital}}{\text{Risk-Weighted Assets}}$	8.00%	+ 2.50%	= 10.50%	10.50%	10.00%
Supplementary Leverage Ratio (Advanced Approach Inst. Only)	= $\frac{\text{CET1 + Additional Tier 1 Capital + Tier 2 Capital - Regulatory Adjustments}}{\text{Accounting Measure of Exposure + Off-Balance Sheet Items +/- Regulatory Adj.}}$	N/A	N/A	= 3.00%	3.00%	N/A
Supplementary Leverage Ratio (Top 8 U.S. Banks Only)	= $\frac{\text{CET1 + Additional Tier 1 Capital + Tier 2 Capital - Regulatory Adjustments}}{\text{Accounting Measure of Exposure + Off-Balance Sheet Items +/- Regulatory Adj.}}$	3.00%	+ 2.00%	=	5.00%	6.00%

Source: Federal Reserve, OCC and FDIC

As noted above, the start of Basel III capital ratio phase in has been delayed to January 1, 2015 (for banking organizations not subject to the advanced approaches rules), but the date for banking organizations to meet the fully phased in Basel III ratios remains unchanged at January 1, 2019. (Please see Appendix A for the phase in schedule). Similarly, the start of Basel III capital deductions has been pushed back to January 1, 2015, essentially shortening the deduction period from four years to three years with 100% application in 2018. (Please see Appendix B for the phase in schedule for capital deductions). Notwithstanding the Basel III well capitalized ratios shown above, each G20 local regulatory authority can choose to impose a countercyclical capital buffer for advanced approaches banking organizations of as much as 2.5% during periods of high private sector credit creation. Moreover, the global systemically important financial institutions (Global SIFIs) buffer ranges from 1.0% to 2.5% depending on the risk profile of the institution. In the extreme, Global SIFIs could be required to maintain as much as 12% common equity/RWA while advanced approaches banking organizations could be required to keep up to 9.50% and non-advanced approaches banking organizations will be required to keep 7%. (Please see Appendix C for the cumulative capital components).

While the levels of these ratios were largely unchanged from the notice of proposed rulemaking, there are several important observations:

- There was no change to the FDIC's PCA common equity, tier 1 leverage and total capital to RWA ratios which are **50 BP BELOW** the Basel III requirements, including the capital conservation buffer.

- There was no change to the FDIC's PCA tier 1 leverage / average assets ratio of 5.00% which is **100 BP HIGHER** than the Basel III requirement of 4.00%.
- There was no change in the supplementary leverage ratio of 3.00% applicable to Advanced Approaches Institutions.
- There were **SUBSTANTIAL INCREASES** in the supplementary leverage ratio to be applied to the top eight U.S. banking organizations; they are **200 BP HIGHER (5%)** at the BHC level and **300 BP HIGHER (6%)** at the Bank level. This proposal is subject to a 60-day comment period.

Even though the common equity/RWA ratio and total capital/RWA ratio levels were not changed from the proposed rules, there are a number of definitional changes intended to simplify and reduce the volatility of capital calculations while also improving the quality and quantity of capital for U.S. banking organizations. A summary of key changes to the definition of capital in the numerator of the Basel III capital calculations and changes to the definition of risk weighted assets in the denominator of the Basel III capital calculations that are applicable to banks that do not follow the advanced approach are described below.

Key changes/clarifications to the definition of capital:

- AOCI:
 - Permits one-time AOCI opt out for banking organizations not subject to advanced approaches rule (those with greater than \$250 billion in assets). Election must be made in the first call report filed by a banking organization after January 1, 2015, when it becomes subject to the final rule. To utilize this one-time election, the banking organization must make five adjustments to its common equity tier 1 capital by: (1) subtracting net unrealized gains and adding any unrealized losses on AFS debt securities, (2) subtracting any unrealized loss on AFS preferred stock, (3) subtracting any accumulated gain and adding any accumulated loss on cash-flow hedges included in AOCI, (4) subtracting AOCI amounts relating to defined pension benefit post retirement plans resulting from the initial and subsequent application of the relevant GAAP standards and (5) subtracting net unrealized gains and adding net unrealized losses on held-to-maturity (HTM) securities included in AOCI. Unrealized losses on AFS equity securities and any foreign currency translation adjustments will continue to be included in common equity tier 1 irrespective of the opt-out election.
- Trust Preferred Securities (TPS) and non-qualifying capital instruments:
 - Permanently grandfathers the tier 1 capital treatment for bank holding companies (BHCs) with total assets of less than \$15 billion as of December 31, 2009 which have TPS and/or non-cumulative perpetual preferred stock outstanding as of May 19, 2010 (subject to the 25% of tier

1 capital limit); but TPS that are in payment deferral and included in tier 2 capital would amortize from tier 2 over five years.

- Permits BHCs with more than \$15 billion in assets as of December 31, 2009 and not subject to advanced approaches rules to permanently include in tier 2 capital the amount of TPS that has been phased out of tier 1 capital.
- Corresponding deductions for investments in bank capital:
 - Confirms that deductions from capital should be in the same form of capital recognized by the issuing banking organization prior to May 19, 2010, the implementation date referenced in the Collins Amendment of the DFA. So, as a result, all TPS outstanding as of May 19, 2010 for these companies that was counted as tier 1 capital by the issuing bank would be now considered tier 1 capital for the investing bank’s corresponding deduction calculation.
- Capital conservation buffer (CCB):
 - Clarifies that a capital distribution for CCB purposes does not include replacement of a capital instrument with a similar or higher form of capital in the same quarter as the issuance.
- Mortgage servicing assets:
 - Confirms that mortgage servicing assets (MSAs) would not be subject to the 90% limitation on valuation of MSAs under current FDIC guidelines.⁶
 - Limits of 10% individual and 15% aggregate investment in MSAs otherwise unchanged.
- Minority interests:
 - Confirms that any “surplus” capital owned by a third-party investor and issued by a subsidiary cannot be included in the parent banking organization’s consolidated regulatory capital. For this purpose, “surplus” capital means the amount by which the subsidiary’s actual capital exceeds the minimum capital requirements plus CCB.
- REIT preferred:
 - Requires evidence of ability for the REIT to declare a consent dividend⁷ for the instrument to count as tier 1 capital.
 - Requires issuing REIT to be an operating entity with intent of earning a profit.

⁶ The agencies have determined that purchased mortgage servicing rights (PMSRs) may be valued at not more than 100 percent of their fair value, because the capital treatment of PMSRs in the final rule (specifically, the deduction approach for MSAs (including PMSRs) exceeding the 10 and 15 common equity deduction thresholds and the 250 percent risk weight applied to all MSAs not subject to deduction) is more conservative than the FDICIA 90% of fair value limitation and the 100 percent risk weight applied to MSAs under existing rules. For the same reasons, the agencies are also removing the 90 percent fair value limitation for all other MSAs under section 475 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) (12 U.S.C. 1828 note).

⁷ A consent dividend is a dividend that is not actually paid to the shareholders, but is kept as part of a company's retained earnings, yet the shareholders have consented to treat the dividend as if paid in cash and include it in gross income for tax purposes.

- Stipulates that the amount to be included as tier 1 capital in the parent organization’s consolidated regulatory capital subject to minority interest limitations noted above.
- Pension fund assets:
 - Exclude shares of a banking organization owned by the pension fund of the organization from capital deduction due to the corresponding deduction.

Key changes/clarifications to definition of risk weighted assets:

- Residential mortgage loans:
 - Retains the current 50% risk weighting for 1–4 family residential, first lien mortgage loans prudently underwritten and performing according to original terms and 100% risk weighting for all other 1–4 family residential loans, excluding FHA/VA loans.
 - Excludes from risk weighting assets for 120 days’ certain credit enhancing representations and warranties for: (i) early payment defaults, (ii) premium refund clauses for 50% risk weighted 1–4 family residential loans, or (iii) warranties for fraud, misrepresentation or incomplete data.
- HVCRE mortgage loans:
 - Retains the 150% risk weighting for HVCRE other than loans to facilitate community development projects and loans secured by agricultural land.
- Non–reliance on ratings:
 - Confirms that U.S. banking organizations cannot rely on credit ratings for purposes of determining either permissibility or risk weighting of non–agency investments; it is important to note that substantially all other G20 countries adopting Basel III capital rules may rely on such ratings for these purposes.
 - Excludes from definition of defaulted securities, for SSFA calculations, deferrals unrelated to the credit of the borrower. Excludes from the definition of resecuritized securities for SSFA calculations the retransferring of exposures for a single asset and the resecuritization of pass–through securities pooled together and reissued as tranching securities.
- Pension fund assets:
 - Calculates the risk weighting of defined pension fund net assets based on a full look–through approach for the underlying investment assets.

With the capital framework largely complete for all but the top eight banking organizations and with 18 months until the January 1, 2015 start date for Basel III implementation, prudent bank managers and Boards of Directors now have time to develop and refine their capital planning, M&A strategy, and loan and investment strategies to enhance performance under the new regulatory capital rules.

CAPITAL PLANNING CONSIDERATIONS

We expect at least three broad changes in capital planning for U.S. banking organizations as a result of the implementation of Basel III and PCA capital requirements:

Higher TCE Requirements

Tangible common equity will now be required to be 82% of tier 1 capital/RWA (7% out of 8.5%) and 67% of Total Capital/RWA (7% out of 10.5%). The amount of permitted alternative tier 1 capital has been substantially reduced from the prior limit of up to 49% of core capital (excluding any grandfathered TPS and cumulative perpetual preferred stock issued by BHC's less than \$15 billion in assets).

If adopted by the FDIC, the supplementary leverage ratio for the top eight U.S. banking organizations will be sharply increased. These eight institutions may be at a competitive disadvantage to their similarly sized G20 peers as the supplementary leverage ratio requirement for the global SIFIs is only 3% compared to 5% at the BHC level and 6% at the bank level for these U.S. institutions.

Limitations will be placed on the use of REIT preferred stock, the only tax efficient form of alternative tier 1 capital that will be available going forward for U.S. banking organizations aside from grandfathered TPS. The limits on surplus minority interest that can be included in consolidated regulatory capital, the requirement that the REIT preferred must be issued by an operating sub of the banking organization, and the requirement for the REIT to be able to pay a consent dividend make this form of capital less attractive for U.S. banking organizations. Moreover, these requirements may trigger a capital event redemption for outstanding REIT preferred securities.

There may potentially be fewer bank buyers of capital instruments issued by other banks. Given the corresponding deduction approach, whereby investment in other bank capital instruments is deducted from the investing bank's own qualifying capital, banking organizations may limit their purchases of other bank capital securities. This could result in a reduction of the number of buyers for non-investment grade rated capital securities issued by banking organizations.

Small Savings and Loan Holding Companies (SLHC) with less than \$500 million in assets will not be exempt from Basel III capital requirements unlike small BHCs. This may give rise to an incentive to convert charters.

There is no hybrid capital security for mutual savings institutions. Mutuals in the U.S. are provided no flexibility to issue hybrid capital instruments like the core capital deferred shares (CCDS) that have been approved as hybrid capital subordinated debt-like instruments in the U.K.⁸

Buffer Above Well Capitalized Requirements

Banking organizations will be encouraged to maintain a substantial buffer above the well capitalized requirements to avoid capital conservation buffer restrictions on dividends, capital management or restricted payment and potential requirements for additional capital to account for other risk factors pursuant to Basel III Section 10(d) and DFA requirements for stress testing. Banking organizations face sharp limitations on dividends, capital repurchases or restricted payments if the full capital conservation buffer (2.5%) is not met. This effectively requires banking organizations to maintain a substantial capital cushion above well capitalized levels. If a banking organization fails to maintain the 2.50% capital conservation buffer then its maximum payout for dividends, capital management, or restricted payments is reduced to 60% — This represents a **40% DROP IN PAYOUT FROM ONLY A 1 BP DECLINE** (i.e. from 2.51% to 2.50%) in the capital conservation buffer. Under Basel III Section 10(d), all banking organizations will now be required to show reasonable ability to survive stress tests and remain well capitalized.

Capital Conservation Buffer	Max Payout % Eligible Retained Income
Less than or = .625%	0%
Less than or = 1.250% and greater than .625%	20%
Less than or = 1.875% and greater than 1.250%	40%
Less than or = 2.50% and greater than 1.875%	60%
Greater than 2.5%	No payment limit applies

Source: Federal Reserve, OCC and FDIC

Accelerated Timing to Meet Well Capitalized Requirements

All insured depositories will have to accelerate their timing to meet Basel III well capitalized ratios from January 1, 2019 to January 1, 2015 in order to comply with the FDIC’s PCA well capitalized requirements. PCA well capitalized capital ratios are only **50 BP below the Basel III requirements** but are implemented as of

⁸ UK regulators have approved the use of a form of hybrid capital that represents deeply subordinated debt. Please see the attached for a link to an article about this approval. <http://stream.wsj.com/story/markets/SS-2-5/SS-2-242174/>

January 1, 2015 compared to January 1, 2019 for Basel III which effectively accelerates the timetable for compliance.

M&A PLANNING CONSIDERATIONS

There will likely be three broad trends in M&A planning and strategy for U.S. banking organizations as a result of the implementation of Basel III and the FDIC’s PCA capital requirements, along with the DFA:

Asset Size–Based Regulatory Standards

There are multiple asset size “speed bumps” which may cause potential buyers to think twice before crossing certain asset size thresholds to make sure that the financial and strategic benefits more than offset the higher cost and complexity. These speed bumps are apparent at the \$500 million, \$10 billion, \$15 billion, \$50 billion, or \$250 billion asset size resulting from: (i) differences in FDIC assessments based on size, (ii) differences in Consumer Finance Protection Bureau (CFPB) regulation and debit card interchange fees based on size, (iii) the grandfathered status of TPS as tier 1 capital if smaller banks reach or exceed \$15 billion in assets, and (iv) the increase in complexity for stress testing based on asset size. The chart below summarizes these factors:

Size Parameter	Organizational Level	Regulator	Potential Impact
> or = \$500 million	Banking Organization	Fed/OCC/FDIC	Subject to Basel III Capital Ratios
> or = \$10 billion	Insured Depository Bank Holding Company Insured Depository	FDIC FED/OCC/FDIC CFPB	Charged FDIC Risk Assessments as Large Bank Subject to DFA annual stress test using CapRe model Subject to debit card interchange fee restriction; and separate examination by CFPB (greater than \$10 billion)
> or = \$15 billion	Banking Organization	Fed/OCC/FDIC	If reach \$15 billion through acquisition then lose grandfathering of TPS as tier 1
> or = \$50 billion	Banking Organization	Fed/OCC/FDIC	Become covered institution subject to more detailed stress testing and financial reporting; potentially subject to Basel III liquidity coverage ratio
> or = \$250 billion	Banking Organization	Fed/OCC/FDIC	Become subject to Advanced Approaches regulation and earlier adoption of Basel III; potentially subject to the Basel III LCR
Global SIFI	Banking Organization	Fed/OCC/FDIC	Become subject to Supplementary Leverage Ratio, Global SIFI Buffer and Basel III LCR

Source: Federal Reserve, OCC, FDIC, and DFA

There are now significant differences in cost of FDIC risk assessments based on the bank’s assets size.⁹ The assessment rates for small banks (less than \$10 billion in net assets) are based on the bank’s CAMELS rating with adjustment for certain performance ratios and, based on a study by the St. Louis Fed, 99% of community banks less than \$10 billion in assets will find that their risk assessments will be lower than the original deposit premiums.¹⁰

Large banks (greater than or equal to \$10 billion in assets) and highly complex banks (\$50 billion or more in assets controlled by a U.S. BHC with \$500 billion or more in assets) base their assessment rates on a complex formula using a performance score and a loss severity factor which results in a total score that is then converted to an assessment rate. This rate increases geometrically with increases in asset quality stress and funding stress. As such, bank subsidiaries that equal or exceed \$10 billion in assets potentially face a sharp increase in assessment rates relative to banks that remain below that threshold. Moreover, such banks would face an increase in risk assessments from investments in CLOs and other “higher risk” assets which are otherwise not required to be separately evaluated by small banks.

Depositories with **\$10 BILLION or LESS in ASSETS** are exempt from the limit on debit card interchange fees of \$0.21 per transaction plus 5 BP of the transaction value and examination by their federal or state regulator. Once a bank exceeds that level then it would be subject to the interchange fee restriction and examination by the CFPB as highlighted in the table below:

	Subject to all Federal Consumer Protection Statutes	Compliance with Consumer Protection Laws	Examination/ Enforcement of Consumer Protection Laws	Per Transaction Limitation on Debit Card Interchange Fees
Greater than \$10 Billion				
Federally chartered banks	YES	CFPB	CFPB	APPLIES
Federally chartered thrifts	YES	CFPB	CFPB	APPLIES
State chartered banks	YES	State Regulators	State Regulators	APPLIES
Non-depositories	YES	CFPB	CFPB	APPLIES
Less than or Equal to \$10 Billion				
Federally chartered banks	YES	Federal Regulator	Federal Regulator	EXEMPT
Federally chartered thrifts	YES	Federal Regulator	Federal Regulator	EXEMPT
State chartered banks	YES	State Regulators	State Regulators	EXEMPT
Non-depositories	YES	CFPB	CFPB	NA

Source: DFA

⁹ The FDIC announced final rules relating to the change in FDIC risk assessments in October of 2012. Please see the attached for complete text of the final rule. http://www.fdic.gov/regulations/laws/federal/2012/2012-10-31_final-rule.pdf

¹⁰ Based on the study conducted by the St. Louis Fed, approximately 99% of community banks with less than \$10 billion in assets will pay lower FDIC assessments under the new FDIC risk assessment rules. <http://www.stlouisfed.org/publications/cb/articles/?id=2116>

The Basel III final rules permanently grandfather TPS as tier 1 capital for BHCs that had TPS outstanding as of May 19, 2010 and total assets of less than \$15 billion as of December 31, 2009 provided that such institution (i) does not exceed \$15 billion in assets as a result of an acquisition and (ii) the BHC is not in payment deferral. If the BHC exceeds \$15 billion in assets based on internal growth, the BHC would face no restriction in the grandfathering of its TPS. To put the importance of this penalty into perspective, we identified 477 BHCs to which this grandfathering provision may apply (i.e. BHCs with total assets less than \$15 billion at December 31, 2009 and TPS outstanding).

As of March 31, 2013, five of these BHCs (SVB, SUSQ, WTFC, VLY AND PB) representing about \$735 million in outstanding TPS already exceeded the \$15 billion asset threshold. Four of these five have completed M&A transactions since 2009 which contributed to their exceeding \$15 billion. Only SVB appears to have exceeded \$15 billion through internal/organic growth thus avoiding the M&A growth penalty. Twelve BHCs representing about \$1.6 billion in outstanding TPS are approaching this threshold (with assets between \$10 and \$15 billion) while 32 institutions representing about \$3.1 billion (with assets between \$5 and 10 billion) will need to pay increased attention to the \$15 billion threshold as they continue to grow. The vast majority of BHCs, both in numbers and dollar amounts, are less than \$5 billion in assets and would likely be less impacted by this penalty in the near term.

(\$,000s)	# BHCs	Total Assets	Total Tier 1 Capital	Total TPS	TPS % Tier 1	Distribution of TPS by Asset Size
BHCs <\$15 B with TPS @ December 31, 2009	477	\$ 931,636,609	\$ 80,559,373	\$ 16,262,985	20.2%	
BHCs with TPS @ March 31, 2013						
BHCs => \$15 billion	5	\$ 88,957,791	\$ 7,283,101	\$ 735,381	10.1%	4.71%
BHCs => \$10 billion and < \$15 billion	12	\$ 147,393,640	\$ 13,791,426	\$ 1,650,515	12.0%	10.56%
BHCs => \$5 billion and < \$10 billion	32	\$ 231,024,661	\$39,937,929	\$ 3,098,316	7.8%	19.83%
BHCs < \$5 billion	424	\$ 572,612,889	\$53,610,651	\$ 10,142,754	18.9%	64.91%
	473	\$ 1,039,988,981	\$96,670,736	\$ 15,626,966	16.2%	100.00%

Source: SNL Financial

Stress testing will now be required of all banking organizations, with the level and complexity of analysis varying significantly based on asset size. There are at least four different types of required stress testing depending on asset size which are highlighted below:

Description	Stress			Results			Requirements
	Test Type	Frequency	Timing	Due	Disclosure		
Systemically Important Financial Institutions							CCAR
1 Ally Financial inc	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		Fed annual test based on input from Company DFAST results assuming BHC
2 American Express Company	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		BHC planned capital actions and includes:
3 Bank of America Corporation	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		1 Sources and Uses of capital over planning horizon
4 The Bank of New York Mellon Corporation	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		2 Description of all planned capital actions over planning horizon
5 BB&T Corporation	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		3 Discussion of any expected changes to BHC's business plan likely to have a material impact on capital or liquidity
6 Capital One Financial Corporation	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		4 Detailed description of the BHC's process for assessing capital adequacy
7 Citigroup Inc.	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		5 BHC's capital policy
8 Fifth Third Bancorp	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		6 Must show maintenance of 5% tier 1 common under all scenarios
9 The Goldman Sachs Group	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		DFAST
10 JP Morgan Chase & Co.	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		1 Company run test using standardized assumptions and 3 stress scenarios – baseline, adverse and severely adverse
11 Keycorp, Inc.	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		2 Supervisory run test using standardized assumptions and 3 stress scenarios – baseline, adverse and severely adverse
12 Morgan Stanley	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		3 Projections include revenue, expenses, losses and post stress capital levels, regulatory capital ratios and tier 1 common
13 The PNC Financial Services Group, Inc.	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		4 Assumption include maintenance of dividend, scheduled P&I payments, but no repurchases or stock issuance
14 Regions Financial Corporation	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		
15 State Street Corporation	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		
16 Sun Trust Banks, inc.	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		
17 U.S. Bancorp	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		
18 Wells Fargo & Company	CCAR/DFAST	Semi-annual	1/5/2013	3/7/2013	3/14/2013		
Large BHC > or = \$50 B < SIFI							
1 BBVA USA Bancshares Inc	CapPR	Annual	1/5/2013	3/7/2013	N/A		1 Sources and Uses of capital over planning horizon
2 BMO Financial Corp.	CapPR	Annual	1/5/2013	3/7/2013	N/A		2 Description of all planned capital actions
3 Citizens Financial Group Inc.	CapPR	Annual	1/5/2013	3/7/2013	N/A		3 Discussion of expected changes in BHC's business plan that may impact capital or liquidity
4 Comerica Inc.	CapPR	Annual	1/5/2013	3/7/2013	N/A		4 Description of process to assess capital adequacy
5 Discover Financial Services	CapPR	Annual	1/5/2013	3/7/2013	N/A		5 BHC's capital policy
6 HSBC North America Holdings Inc.	CapPR	Annual	1/5/2013	3/7/2013	N/A		6 Basel III transition plans to comply with capital ratios
7 Huntington Bancshares Inc.	CapPR	Annual	1/5/2013	3/7/2013	N/A		7 Approval or not of capital plans disclosed but CapRe bank will not disclose capital or other ratios until 2014
8 M&T Bank Corp	CapPR	Annual	1/5/2013	3/7/2013	N/A		
9 Northern Trust Corp.	CapPR	Annual	1/5/2013	3/7/2013	N/A		
10 UnionBanCal Corp	CapPR	Annual	1/5/2013	3/7/2013	N/A		
11 Zions Bancorporation	CapPR	Annual	1/5/2013	3/7/2013	N/A		
Medium BHCs and Depositories > \$10 B < \$50 B							
99 Institutions	Stress Test	Annual	1/5/2014	3/31/2014	After 90 days		1 Stress test using September 30 calendar year data
							2 Use three stress scenarios provided by the OCC
							3 Show potential impact on capital ratios under current U.S. capital ratios
							4 Show pre-provision net revenues, market and credit losses and loan loss reserves
Community Banks < \$10 B							
Over 1,830 national banks and federal thrifts	Stress Test	Annual	TBD		TBD		1 Estimated loan losses under stressed scenarios
							2 Estimated impact on earnings
							3 Estimated impact on capital over two year planning horizon

Source: Federal Reserve, OCC and FDIC

Banking organizations with total assets of \$50 billion or more face a significant step up in expense and complexity for stress testing. Before exceeding this asset level, potential buyers will likely give serious consideration to the strategic and financial benefits of the merger compared to the added cost and effort of the next level of stress testing and regulatory oversight.

Pre-Acquisition Survivor Planning for AOCI and Risk Weighting

Acquirers will be forced to do pre-acquisition survivor planning to “opt out” or “opt in” of AOCI treatment for AFS securities and select either the SSFA or Gross Up method to calculate the risk weighting for non-agency securities. Acquirers will have to choose between “opting in” or “opting out” of AOCI changes flowing through regulatory capital. For example, if two non-advanced approaches banks are considering a M&A transaction and each has not made an AOCI opt out election, the surviving bank cannot make an AOCI

opt out election. Alternatively, if either one of the banks has made an opt-out election, the surviving bank has the option of electing to make an AOCI opt out election but must do so in the first regulatory reporting date following the transaction closing.

Beginning on January 1, 2015, acquirers will also have to choose between using the SSFA or Gross Up method for risk weighting of non-agency securities. The SSFA method of calculating risk weights for non-agency securitizations generally results in lower risk weights for investments in senior tranches of securitizations with low delinquency collateral and high levels of subordination. The Gross Up method generally results in lower relative risk weights than the SSFA method for investments in junior tranches of high delinquency collateral and lower levels of subordination. While the agencies have not provided a specific limitation on the frequency with which risk weighting methods can be changed, they have indicated that there “should not be a need for frequent changes” absent significant changes to a banking organization’s securitization activities. Since the choice of risk weighting method results in such different outcomes the SSFA/Gross Up method decision can have a significant impact on capital and earnings of the acquirer. With limited ability to make changes to the risk weighting methodology after closing, acquirers must be prepared to do pre-acquisition analysis and planning for the risk weighting methodology as we approach the January 1, 2015 effective date of implementation.

Divestitures of Non-Strategic Assets and Business Lines

U.S. banking organizations will likely continue to divest non-strategic assets and lines of business in an effort to avoid higher risk weighting or regulatory capital penalties. For example, as previously mentioned, investment in MSAs that exceed 10% of tangible common equity will be deducted from regulatory capital. Bank of America has recently sold MSAs for over \$300 billion of loans and reduced their investment in MSAs as a percentage of tier 1 common from 11.02% to 4.33% from Q2 of 2011 to Q1 of 2013. During this same period, Wells Fargo, JPMorgan and Citigroup also dramatically reduced their MSAs/tier 1 from 18.50% to 11.86% for Wells Fargo, from 10.10% to 5.55% for JPMorgan, and from 3.63% to 1.72% for Citigroup.¹¹ In addition to deductions from capital for investment in certain lines of business, the Global SIFI banks also face significant capital surcharges ranging from 1.00% to 3.50% based on their risk classification.

¹¹ Based on the SNL Financial Article from May 30, 2013 – *Flurry of new buyers heating up MSR market*. Please see the attached link for complete text.
<http://www.snl.com/InteractiveX/Article.aspx?id=17809516>

Risk Bucket	Ranking	CET1 Surcharge Amount (CET1 % RWA)	U.S. Global-SIFIs
5	D	3.50%	None
4	C - D	2.50%	Citigroup, JP Morgan
3	B - C	2.00%	
2	A - B	1.50%	Bank of America, Bank of New York Mellon, Goldman Sachs, Morgan Stanley
1	Cut-off Point -A	1.00%	State Street, Wells Fargo

Rather than issue additional tangible common equity to offset their capital surcharges, these institutions may downsize their operations and exposures that attract the most surcharge amount and are not strategic to their core franchises.

Category	Individual Indication	Weighting	
Cross Jurisdictional Activity	• Cross-jurisdictional claims	10.00%	20%
	• Cross-jurisdictional liabilities	10.00%	
Size	• Total exposures (as per B III leverage ratio)	20.00%	20%
Interconnectedness	• Intra-financial system assets	6.67%	20%
	• Intra-financial system liabilities	6.67%	
	• Wholesale funding ratio	6.67%	
Substitutability/Financial Institution Infrastructure	• Assets under custody	6.67%	20%
	• Payments cleared and settled through payment system	6.67%	
	• Value of underwritten debt and equity transactions	6.67%	
Complexity	• OTC derivatives notional value	6.67%	20%
	• Level 3 assets	6.67%	
	• Assets held for trading and available for sale value	6.67%	
			100%

Actions that the SIFIs can take to reduce their SIFI surcharge include reducing their wholesale funding ratio, assets under custody, OTC derivatives notional value, Level 3 assets and assets held for trading and sale. For example, according to the Federal Reserve Bank of New York, the primary dealers in the U.S.

dramatically reduced their inventory of corporate bonds from a peak of about \$230 billion in October of 2007 to just \$56 billion as of March 2013.¹²

KEY INVESTMENT AND LOAN STRATEGIES

- Position the AFS investment portfolio to enhance yield without regulatory capital volatility by “opting out” of the AOCI adjustments for AFS debt securities.
- Implement cash flow hedges of liabilities to protect tangible GAAP equity while avoiding capital erosion in a rising rate environment.
- Reevaluate investments in non-agency securitizations in light of changes to the SSFA risk weighting and requirements for pre-purchase and on-going due diligence. The SSFA calculation will now exclude loans with payment deferrals unrelated to the credit of the borrower. The definition of resecuritized assets has also been narrowed to exclude the retranching of exposures for a single asset (such as the resecuritization of a real estate mortgage conduit where the assets are all derived from a single underlying entity, and exclude the resecuritization of pass-through securities pooled together and reissued as tranching securities). However, the due diligence requirements for investment in non-agency securitizations including the pre-purchase analysis, on-going monitoring, and 1,250 percent risk weighting for non-compliance were reconfirmed. These requirements include the documentation of: (i) structural features of the securitization that materially impact the performance of the exposure, for example, the contractual cash-flow waterfall, waterfall-related triggers, credit enhancements, liquidity enhancements, market value triggers, the performance of organizations that service the position, and deal-specific definitions of default; (ii) relevant information regarding the performance of the underlying credit exposure(s), for example, the percentage of loans 30, 60, and 90 days past due; default rates; prepayment rates; loans in foreclosure; property types; occupancy; average credit score or other measures of creditworthiness; average LTV ratio; and industry and geographic diversification data on the underlying exposure(s); (iii) relevant market data of the securitization, for example, bid-ask spread, most recent sales price and historical price volatility, trading volume, implied market rating, and size, depth and concentration level of the market for the securitization; and (iv) for resecuritization exposures, performance information on the underlying securitization exposures, for example, the issuer name and credit quality, and the characteristics and performance of the exposures underlying the securitization exposures. The level of the banking organization’s analysis is expected to be commensurate with the complexity of the exposure and the materiality of the exposure in relation to capital of the banking organization and is required to be updated quarterly. If a banking organization is not able to meet these due diligence requirements and demonstrate a comprehensive understanding

¹² Based on data from the New York Federal Reserve. Please see the attached link for more details. <http://www.newyorkfed.org/markets/glds/search.html>

of a securitization exposure to the satisfaction of its primary Federal supervisor, the banking organization would be required to assign a risk weight of 1,250 percent to the exposure.

- Continue to sell MSAs in light of capital deductions as noted above.
- Retain higher yielding 1–4 family residential, first lien and second lien performing mortgage loans in light of the elimination of the potential higher risk weighting if such loans were considered Category 2 loans.
- Retain, but re-price, HVCRE loans to adjust for the increase in risk weighting from 100% to 150%. For example, the chart below shows that to maintain the same ROE, an increase in the risk weighting of a HVCRE loan from 100% to 150% would require an increase of about 50 BP in pricing. Lenders that cannot pass along this increase in risk weighting for HVCRE to borrowers may suffer declines in returns on risk-weighted capital.

Loan Risk Weighting	Capital Requirement (%)	Capital Requirement (\$)	Cost of Capital	Deposit Funding (\$)	Cost of Deposits	Total Cost of Funding (\$)	Total Cost of Funding (%)	Loan Repricing to Borrower (BP)
50%	4.00%	\$ 4.00	\$ 0.60	\$ 96.00	\$ 1.92	\$ 2.52	2.52%	
75%	6.00%	\$ 6.00	\$ 0.90	\$ 94.00	\$ 1.88	\$ 2.78	2.78%	0.26%
100%	8.00%	\$ 8.00	\$ 1.20	\$ 92.00	\$ 1.84	\$ 3.04	3.04%	0.52%
125%	10.00%	\$ 10.00	\$ 1.50	\$ 90.00	\$ 1.80	\$ 3.30	3.30%	0.78%
150%	12.00%	\$ 12.00	\$ 1.80	\$ 88.00	\$ 1.76	\$ 3.56	3.56%	1.04%
175%	14.00%	\$ 14.00	\$ 2.10	\$ 86.00	\$ 1.72	\$ 3.82	3.82%	1.30%
200%	16.00%	\$ 16.00	\$ 2.40	\$ 84.00	\$ 1.68	\$ 4.08	4.08%	1.56%

Source: Sandler O'Neill Calculations

- Another factor that could have a major impact on investment strategy could be the potential application of the Volcker Rule restrictions to bank investment in covered funds that would be subject to the Investment Company Act (ICA) restrictions except for exemptions provided by the ICA under Sections 3(c)(1) and 3(c)(7). Many asset backed securities and collateralized loan offerings rely on those exemptions and as such would be considered a covered fund under the Volcker Rule and subject to “covered transaction” limitations and potential deductions from tier 1 capital for the amount of investment. There has been substantial industry push back on this front with expectations that open issues will be resolved by the end of the conformance period on July 21, 2014.

SUMMARY

The Basel III capital ratios have now been simplified and we believe that the volatility of capital calculations for most banks will be reduced. The regulators have sought to accomplish this by reverting back to current capital rules for the risk weighting of single family residential mortgages, providing the opt-out of most AOCI adjustments for all banks not subject to the advanced approaches capital rules, and providing clarity in certain definitions of capital rules. We believe that the Basel III capital rules, along with related regulation from the DFA, will result in meaningful changes in capital planning, M&A and investment strategy for U.S. banking organizations. We see three key factors influencing capital planning: higher TCE requirements, buffer above well capitalized levels and accelerated timeline for ratio compliance. We also see three trends impacting M&A strategy: asset size speed bumps, pre-acquisition survivor planning, and business line divestitures of non-strategic assets and lines of business. Prudent management teams and Boards of Directors that anticipate and plan for these changes will be positioned to outperform in the post-Basel III environment.

Thomas W. Killian is a Principal of Sandler O'Neill + Partners, L.P. His 34-year career in commercial and investment banking includes seven years of commercial banking experience with NationsBank, structuring and arranging leveraged finance transactions; two years with Salomon Brothers, transacting capital markets and advisory assignments for a variety of major corporations; five years with J.P. Morgan, managing financial advisory and capital raising activities for banks and thrifts in the Western region of the United States; and 20 years with Sandler O'Neill, advising banks, thrifts, and insurance companies on a variety of capital markets, strategic advisory and M&A assignments.

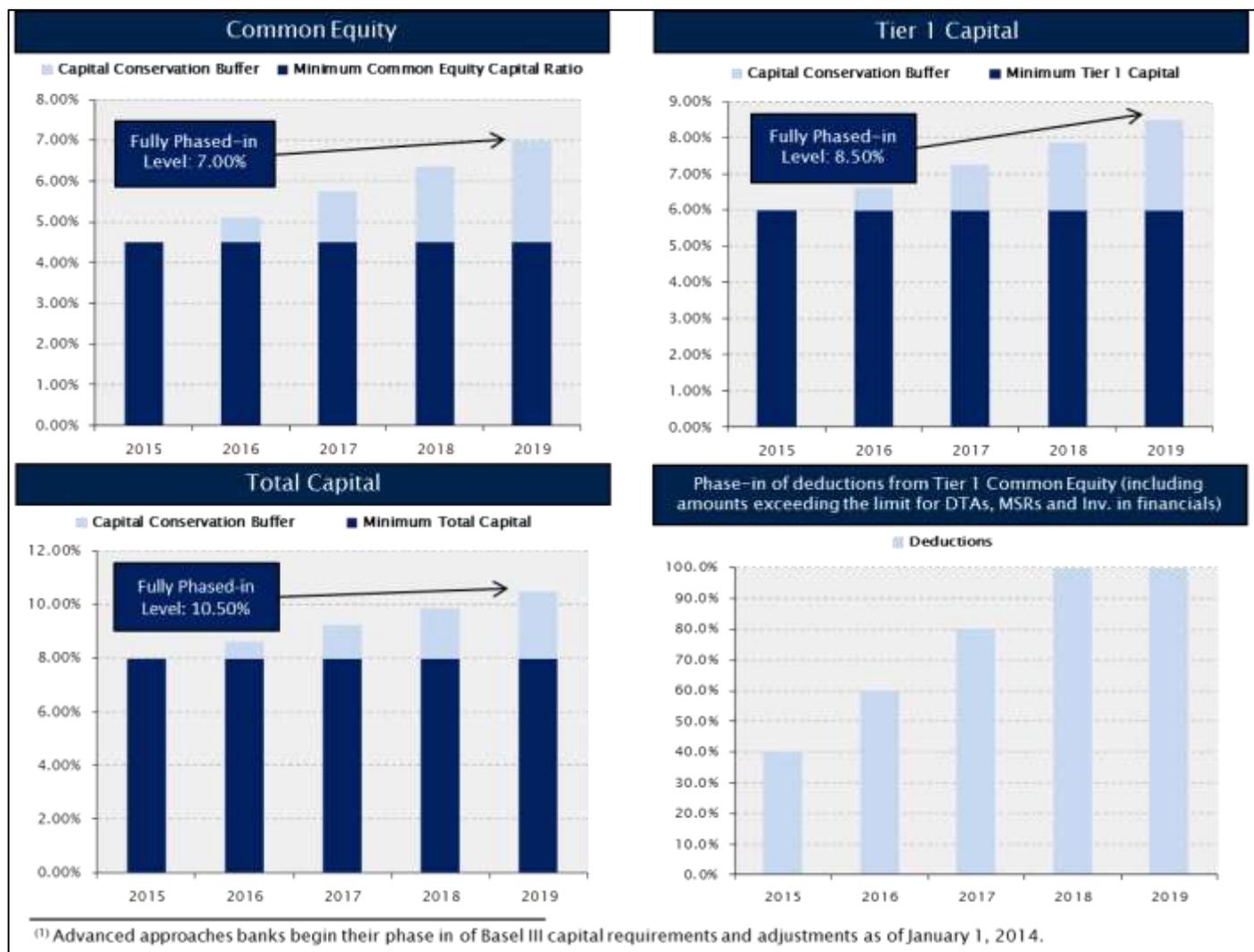
At Sandler O'Neill, Mr. Killian has managed the successful execution of 13 M&A transactions representing over \$2.4 billion in deal value and \$8.5 billion of capital raising transactions. He has co-managed the Sandler O'Neill team responsible for successfully completing 17 pooled trust preferred transactions that raised over \$7 billion for approximately 650 financial institutions. Included in Mr. Killian's capital raising transactions are eight recapitalization and restructuring transactions that involved complex capital structures designed to preserve tax benefits for the issuing institutions. He functions as a primary resource in structuring and implementing complex capital markets transactions for financial institutions.

Mr. Killian holds a Bachelor of Science from the University of North Carolina at Chapel Hill, where he was a John Motley Morehead Merit Scholar, and a Masters in Business Administration from Northwestern University's J.L. Kellogg Graduate School of Management. He has represented Sandler O'Neill in conferences with the Federal Financial Institutions Examination Council, the Federal Reserve, the Federal Deposit Insurance Corporation, and SNL Financial to discuss capital structure, Dodd-Frank and Basel III related issues. His articles have appeared in Bank Accounting & Finance, U.S. Banker and Modern Bankers, a publication of the Peoples Bank of China.

Mr. Killian is also a founding board member of Students Bridging the Information Gap, a 501(c)(3) charity that provides computers, books and other support to African schools and orphanages.

Appendix - A

Basel III Capital Requirements and Deductions Phased-in from 2015 to January 1, 2019 for Non-Advanced Approaches Banking Organization ¹



Appendix – B

Capital Ratio Calculation Complicated by Quarterly Deductions from and Adjustments to Tier 1 Common for Non-Advanced Approaches Banks ¹

		Phase Out Period				
		2015	2016	2017	2018	
Cumulative Amount		40%	60%	80%	100%	
Period for Capital Deductions from or Adjustment to Tier 1 Common:						
(a)	Goodwill ⁽²⁾	██████████				<i>(b), (c), or (d) may individually not exceed 10% of common equity and may not collectively exceed 15% of common equity; any amount exceeding 15% limit is deducted from common equity</i>
(b)	Deferred tax asset related to timing differences ⁽³⁾	██████████				
(c)	Mortgage servicing asset	██████████				
(d)	Significant Inv in unconsolidated financial entity	██████████				
(e)	Inv in capital beyond the scope of reg. consolidation	██████████				<i>If capital investment in (e) is greater than 10% common equity, then the amount exceeding 10% is deducted from same component of capital</i>
(f)	Forward loan loss provisioning ⁽⁴⁾	██████████				
(g)	Unrealized gains and losses on AFS Securities ⁽⁵⁾	██████████				<i>Deductions for (f), (g), (h), (i), (j), (k), (l) and (m) would be made without benefit of the 15% basket</i>
(h)	Defined benefit pension fund assets and liabilities ⁽⁵⁾	██████████				
(i)	Cash flow hedge revenue ⁽⁵⁾	██████████				
(j)	Gain on sale related to securitization transactions	██████████				
(k)	Cumulative gains and losses on fair valued liabilities due to own changes in credit ⁽⁵⁾	██████████				
(l)	Inv in non-permitted S&L activities	██████████				
(m)	Inv in hedge funds and PE funds not permitted by Volcker Rule	██████████				

(1) Advanced approaches banks begin their phase in of Basel III capital requirements and adjustments as of January 1, 2014.

(2) Goodwill and other intangible assets (other than MSAs) net of associated DTLs are deducted 100% in 2015 for non-advanced approaches and in 2014 for advanced approaches banking organizations. For purposes of this deduction, goodwill includes the amount of goodwill embedded in the valuation of a significant investment in the common stock of an unconsolidated financial institution that is accounted for under the equity method and reflected in the consolidated financial statements of the banking organization.

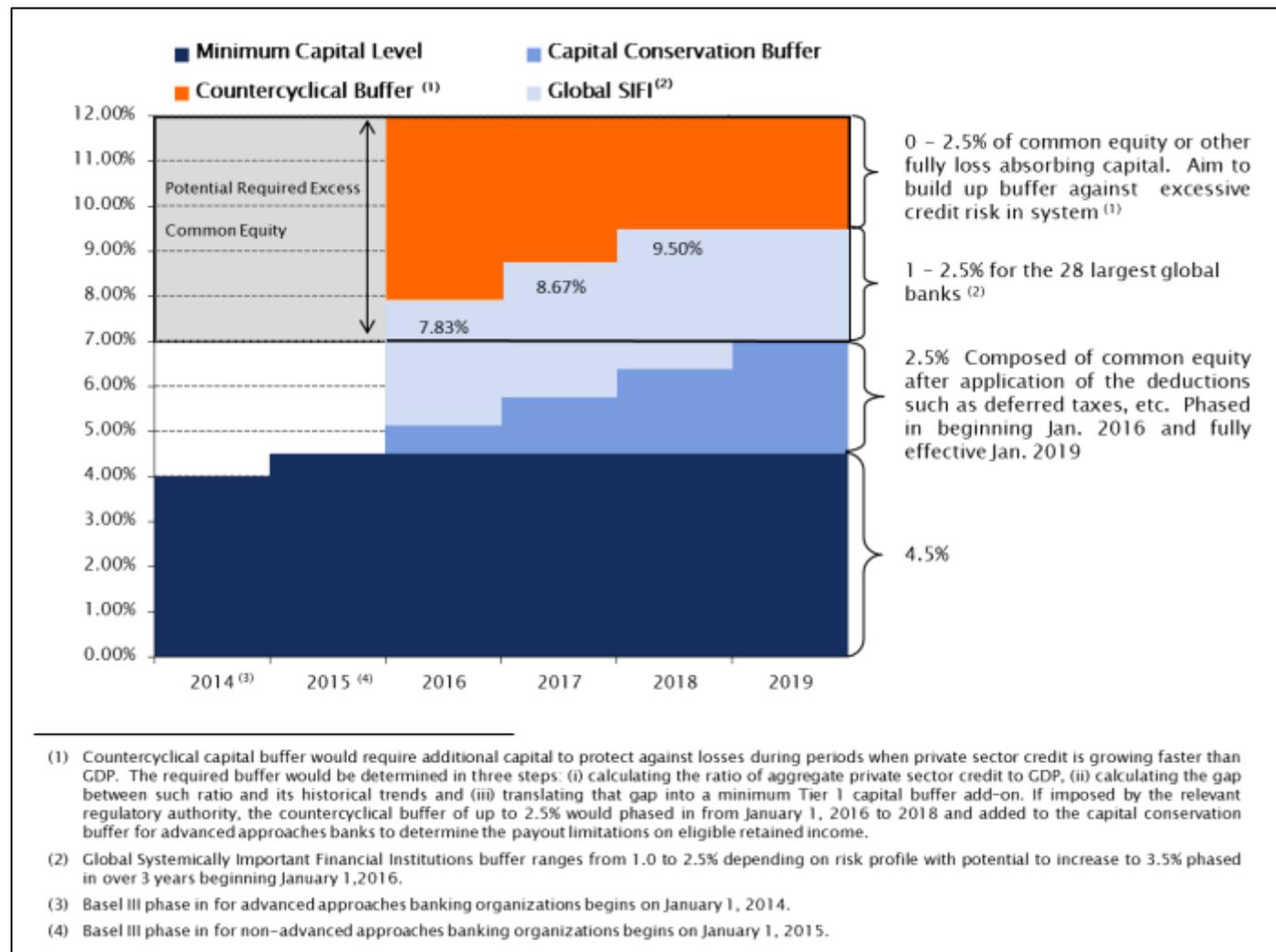
(3) DTAs that arise from temporary differences that the banking organization may realize through NOL carrybacks are NOT subject to the 10% or 15% limitation; this limitation applies to DTAs that arise from net operating loss and tax credit carry forwards net of related valuation allowance and DTLs.

(4) Advanced approaches banking organizations are required to deduct from common equity tier 1 capital the amount of expected credit loss that exceeds the banking organization's eligible reserves. Does not apply to other banking organizations.

(5) Banking organizations not subject to the advanced approaches rules may elect to calculate regulatory capital by using the current treatment for AOCI under the general risk based capital rules which excludes most AOCI amounts. More specifically, those banking organizations may make a one-time permanent election in the first call report following the adoption of the final capital rules (expected to January 1, 2015) to continue using the AOCI treatment under the current general risk based rules. Such banking organizations that opt out of AOCI adjustments must make five adjustments to their tier 1 capital elements referenced on page 4 of this note.

Appendix - C

Common Equity Ratio Could Be as High as 12.00% for Global Systemically Important Financial Institutions (Global SIFIs)



Appendix - D

Simplified Supervisory Formula Approach (SSFA)

$K_{ssfa} = \frac{(e^{au} - e^{al})}{a(u - l)}$ <p>If $D \leq K_A$, $RW = 1250\%$ If $A \geq K_A$, $RW = K_{SSFA} + 1250\%$</p> <p>If $A < K_A$ and $D > K_A$,</p> $RW = \left[\left(\frac{K_A - A}{D - A} \right) \times 1250\% \right] + \left[\left(\frac{D - K_A}{D - A} \right) \times 1250\% \times K_{ssfa} \right]$	<p>A (Attachment Point) = % of collateral whose losses would be born by subordinate tranches</p> <p>D (Detachment Point) = % of collateral that if defaulted would be 100% loss for tranche = % of tranche + % subordinate tranches</p> <p>W = % of collateral that is "delinquent"</p> <p>Kg = Weighted Average Capital Required on the Underlying Exposures or 8% x Average Risk Weighting of the collateral</p> <p>$K_A = (1 - W) \times K_g + (W) \cdot 0.5$</p> <p>$a = -1 / (P \times K_A)$ $e = \text{Natural log} = 2.71828$</p> <p>$u = D - K_A$ $l = \text{Max. of } 0 \text{ and } A - K_A$</p> <p>P (Parameter) = .5 for Non Re-Remics 1.5 for Re-Remics</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

General Information and Disclaimers

This report has been prepared and issued by Sandler O’Neill + Partners, L.P., a registered broker–dealer and a member of the Financial Industry Regulatory Authority, Inc. The information contained in this report (except information regarding Sandler O’Neill and its affiliates) was obtained from various sources that we believe to be reliable, but we do not guarantee its accuracy or completeness. Additional information is available upon request. The information and opinions contained in this report speak only as of the date of this report and are subject to change without notice. Contact information for Sandler O’Neill and the author of this report is available at www.sandleroneill.com.

This report has been prepared and circulated for general information only and presents the author’s views of general market and economic conditions and specific industries and/or sectors. This report is not intended to and does not provide a recommendation with respect to any security. This report does not take into account the financial position or particular needs or investment objectives of any individual or entity. The investment strategies, if any, discussed in this report may not be suitable for all investors. Investors must make their own determinations of the appropriateness of an investment strategy and an investment in any particular securities based upon the legal, tax and accounting considerations applicable to such investors and their own investment objective. Investors are cautioned that statements regarding future prospects may not be realized and that past performance is not necessarily indicative of future performance.

This report does not constitute an offer, or a solicitation of an offer, to buy or sell any securities or other financial instruments, including any securities mentioned in this report. Nothing in this report constitutes or should be construed to be accounting, tax, investment or legal advice.

Neither this report, nor any portion thereof, may be reproduced or redistributed by any person for any purpose without the written consent of Sandler O’Neill.

© 2013 Sandler O’Neill + Partners, L.P. All rights reserved.