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Regulatory Simplification/Accounting Complication

- Regulatory Relief Bill (EGRRCPA or S.2155) on track for implementation early in 2019
- Capital rules and lending requirements simplified for over 5,400 community banks; potential for greater use of preferred stock
- Stress testing, liquidity and enhanced prudential standards tailored for larger U.S. banks; four new risk-based standards for regulatory classification
- Adoption of CECL and ASC 842 (lease accounting) beginning in 2019; triggers both earnings and balance sheet volatility; capital cushion above well capitalized levels prudent
- A new forward-looking and evolving capital playbook required to manage transitions between regulatory regimes including accounting complications

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This is the latest in a series of reports[1] necessitated by the rulemaking for EGRRCPA and other regulatory (and accounting) changes still in flux. Regulatory finality is clearly a journey and not a destination. As a result, we are endeavoring to provide a roadmap for capital, liquidity, and accounting changes that will have ongoing route changes. Until more is solidified, we will strive for a balance between clarity and depth to identify the key issues and considerations, avoiding too much depth and overly generalized exposition.

On November 16th at a Federal Reserve symposium, Jelena McWilliams, Chairman of the FDIC, stated that her priority was to "substantially simplify" the capital requirements and "reduce the compliance burden for small banks" but not to "reduce the loss absorbing capacity at banks."[2] Simplification without compromise of loss absorbing capacity is critical to economic growth in the U.S. because community banks with total assets of less than $10 billion comprise over 95% of U.S. banks and provide about 50% of loans to small businesses that in turn provide almost half of all U.S. private sector employment.[3]

But the Financial Accounting Standards Board (FASB) did not get the simplification message. Two near-term accounting changes -- CECL and ASC 842 - - will substantially complicate financial reporting, trigger credit costs and increase balance sheet size over the

[1] For related Sandler O'Neill reports please see: Changes to Small BHC Policy Statement dated April 20, 2015, Liquidity Rules Now the Binding Constraint for Large Banks dated July 6, 2016, Simplification of Basel III Capital Rules dated October 10, 2017, The Pendulum Swings dated March 20, 2018, and Bank Regulation Resizing dated May 29, 2018 found at http://www.sandleroneill.com/resource-center-strategy-reports-capital.htm.
[2] Remarks by Jelena McWilliams at the Federal Reserve Bank of Chicago Thirteenth Annual Community Bankers Symposium. "Back to Basics". Chicago, Illinois. November 16, 2018.
[3] Remarks by Jelena McWilliams. "Back to Basics"; Chicago, Illinois, November 16, 2018.

next several years. The convergence of regulatory relief with CECL and ASC 842 will complicate capital planning and require a forward-looking playbook to manage transitions between regulatory capital regimes with accounting complications.

The U.S. Congress recognized the need for regulatory simplification for community banks and modification of stress testing, liquidity requirements and enhanced prudential standards for larger banks when it passed the bi-partisan regulatory relief bill referred to as the Economic Growth, Regulatory Relief and Consumer Protection Act (EGRRCPA or S.2155) in May 2018.[4] More recently, on November 20th, the Notice of Proposed Rulemaking (NPR) for the Community Bank Leverage Ratio (CBLR) was published which provides flexibility for community banks to select among three capital regimes, including Basel III, the Community Bank Leverage Ratio (CBLR) and the Small Bank Holding Company Policy Statement (Policy Statement).[5] While banks with $10 billion or more in assets remain subject to Basel III, they were granted relief from stress testing, liquidity and enhanced prudential risk management requirements based on size and risk classification.[6] For those community banks that did not use the CBLR framework, the Basel III simplification, when finalized, will enable them to continue using Basel III with relief from the most punitive and complicated capital deductions.

Current expected credit loss (CECL), which has become controversial within the industry, requires U.S. banking institutions to estimate lifetime losses on all loan and lease exposures at inception and recognize those losses beginning in 2020 for SEC filers, 2021 for Public Business Entities (PBEs), and 2022 for all others.[7] Under lease accounting standard (ASC 842), operating leases will be added back to the balance sheet through the present value of a right of use asset (risk-weighted 100%) offset by the present value of the lease liability. Gains on the sale and leaseback of property are recognized upfront rather than being amortized over the life of the lease. These changes from ASC 842 are effective beginning in 2019 for PBEs, and 2020 for non-PBEs.[8]

The implementation of these two, new accounting standards will create volatility in capital calculations. More importantly, they will greatly complicate the selection of the appropriate capital framework for community banks. All banks will now be required to prepare a detailed pro forma analysis of impact of CECL and ASC 842 along with the appropriate capital cushions to remain well capitalized under relevant economic and strategic scenarios and within asset size constraints. Going forward, capitalization becomes a three-dimensional exercise. To address the convergence of EGRRCPA with CECL and ASC 842, this report aims to help answer the following questions in the context of the new accounting framework:

- First, what is the status of EGRRCPA rulemaking for regulatory relief?
  - What will now be the capital frameworks available to U.S. banks based on consolidated asset size and risk profile?
  - What are the benefits and considerations of the three capital frameworks available for community banks and how should the optimal framework for each bank be selected?
  - How did EGRRCPA regulatory relief change stress testing, liquidity and enhanced prudential standards (EPS) applicable to large U.S. banks and how do the four new risk buckets impact the determination of Category I, II, III or IV regulatory status?
- Second, what are the CECL and ASC 842 accounting changes and how will implementation of these changes impact bank earnings and capital?
- Third, what is a forward-looking capital playbook that will enable community and larger banks to take advantage of the EGRRCPA regulatory simplification while being mindful of the pending accounting complications?

[4] U.S. Congress. Senate – Banking, Housing and Urban Affairs Committee. S.2155 – 115th Congress (2017-2018). Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA). May 24, 2018.

[5] Department of Treasury (Office of the Comptroller of the Currency), Federal Reserve System, Federal Deposit Insurance Corporation. Notice of Proposed Rulemaking for Regulatory Capital Rule: Capital Simplification for Qualifying Community Banking Organizations. November 20, 2018.

[6] Department of Treasury (Office of the Comptroller of the Currency), Federal Reserve System, Federal Deposit Insurance Corporation. Notice of Proposed Rulemaking for Regulatory Capital Rule: Proposed Changes to Applicability Thresholds for Regulatory Capital and Liquidity Requirements. November 20, 2018.

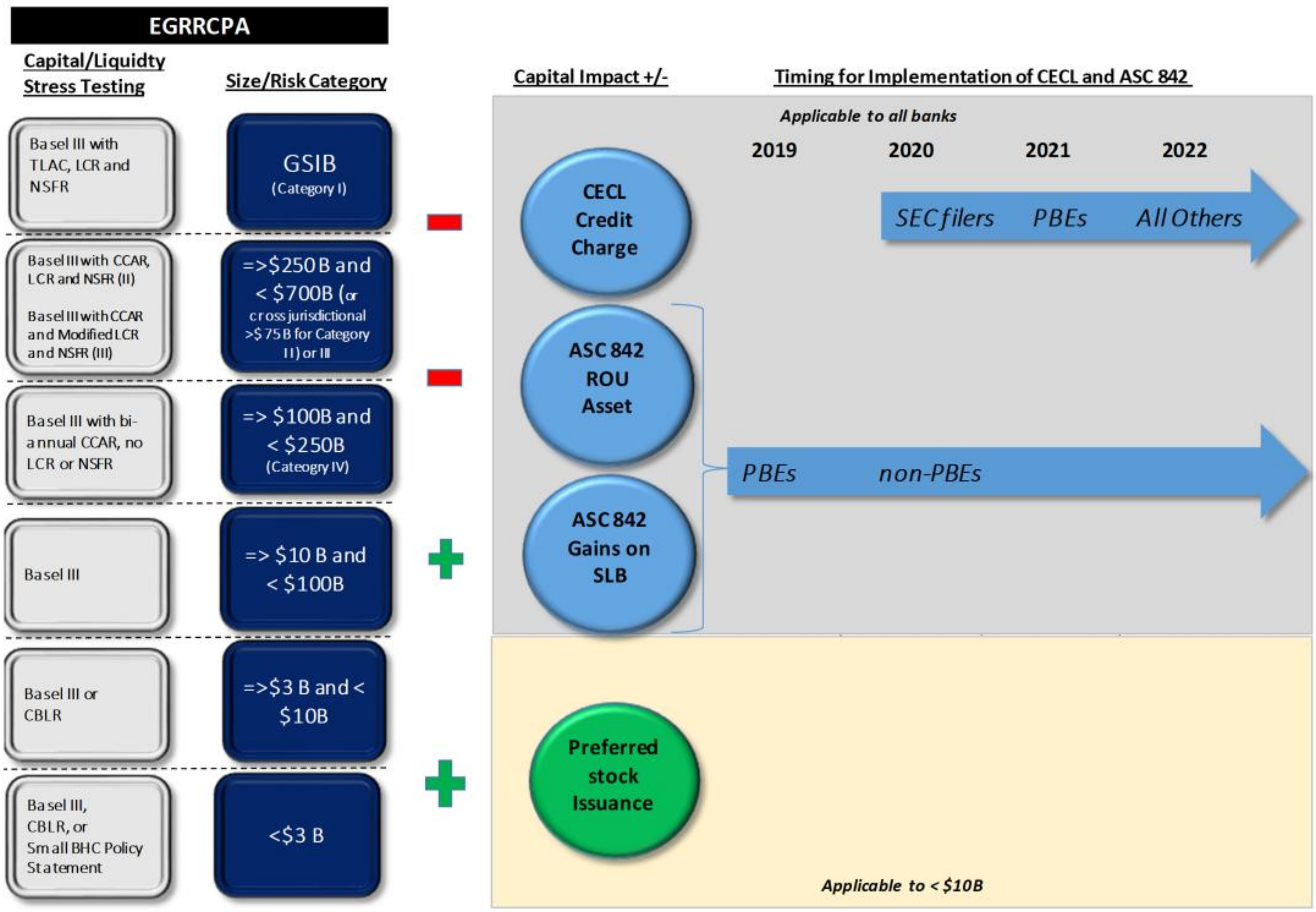
[7] FASB Accounting Standards. Financial Instruments – Credit Losses (Topic 326) Measurement of Credit Losses on Financial Instruments. Update No. 2016-13. June 2016.

[8] FASB Accounting Standards. Leases (Topic 842). No. 2016-02. February 2016.

As illustrated below in Chart A, we present in a single diagram the integrated framework for regulatory relief with the impending change in CECL and ASC 842 over the next several years.

Chart A

Integrated Framework for Convergence of EGRRCPA, CECL and ASC 842



As highlighted above, the EGRRCPA framework includes six different size and risk categories that determine the capital, liquidity and stress testing requirements for a banking organization. Once a banking organization advances to the next highest size or risk category, it must be prepared to comply with the applicable capital regime offered and liquidity or stress testing requirements.

With ASC 842 being implemented beginning in 2019 and CECL the following year, these changes will begin to have a negative capital impact from the credit charge (CECL) and add back to the balance sheet for the right of use asset (ROU) for ASC 842. However, ASC 842 also provides an opportunity for an upfront gain on the sale and leaseback of appreciated property recognized in the year the sale-leaseback closes.

For banking organizations electing to use the CBLR framework, cumulative or non-cumulative preferred stock can comprise up to 40% of tangible equity potentially providing an exciting opportunity to support growth in that capital regime.

EGRRCPA – Substantial Progress in Rulemaking

The EGRRCPA legislation passed on May 24, 2018 included five main categories of regulatory relief for capital requirements, enhanced prudential standards, liquidity/funding, lending, and regulatory oversight. As shown below in Chart B, as of December 20, 2018, 10 of the 13 key rulemakings for EGRRCPA either have been finalized or have a Notice of Proposed outstanding. This presents about 77% completion of EGRRCPA with the remainder expected by Q1 of 2019.

Chart B

EGRRCPA Status – Key Rulemaking Substantially Complete

Category	Selected Key Provisions	S.2155 Reference	Regualtory Relief	Description	Date of NPR or Rulemaking
Capital	1	Section 201	Community Bank Leverage Ratio	Qualifying Banks < $10 B maintaining TE/TA of between 8-10% deemed in compliance with Basel III capital requirements	20-Nov-18
	2	Section 207	Small BHC Policy Statement	Increases the asset size threshold from $1 B to $3 B with no other changes to the existing rule	30-Aug-18
	3	Section 402	Supplemental Leverage Ratio (SLR) for Custody Banks	Excludes custodial deposits retained at the Fed from total deposits for the SLR calculation for custodial banks	
Enhanced Prudential Standards (1)	4	Section 401	Stress Testing	Category I - Annual CCAR, Supervisory and Company Stress Tests with TLAC Category II - Annual CCAR, Supervisory and Company Stress Tests Category III - Annual CCAR, Supervisory and Company Stress Tests Category IV - Bi-Annual CCAR and Supervisory Stress Tests	31-Oct-18
		Section 401(Cont'd)	Liquidity Coverage Ratio and Net Stable Funding Ratio	Category I - 100% LCR and NSFR along with monthly liquidity stress test Category II - 100% LCR and NSFR along with monthly liquidity stress test Category III - 70 to 85% LCR and NSFR along with month stress test Category IV - No LCR or NSFR but quarterly liquidity stress test	31-Oct-18
	5	Section 403	Municipal Obligations Treated as HQLA for LCR	Investment grade munis treated as high-quality liquid assets for the liquidity coverage ratio (LCR)	22-Aug-18
Liquidity/ Funding	6	Section 202	Reciprocal Deposits	Reciprocal deposits permitted for up to $5 B or 20% of total liabilities for well capitalized institutions	26-Sep-18
Lending					
	7	Section 101	QM Relief	Banks <$10 B exempt for ATR liability for their loans if retained or sold to other banks. Safe harbor for non-QM.	
	8	Section 104	HMDA Relief (with acceptable CRA rating)	Disclosure requirements limited if originate < 500 closed end mortgages or open-end lines of credit (2yrs prior)	7-Sep-18
	9	Section 108	Escrow Relief	Exemption from TILA escrow requirement for banks that make 1,000 or fewer first lien mortgages on SFR homes	
	10	Section 214	HVCRE Risk Weighting	CRE exposures classified as HVCRE ADC RW at 150%; 15% equity requirement satisfied w/ appreciated property	18-Sep-18
Regulation	11	Section 203	Volcker Rule	Banks < $10 B and total trading A/L not more than 5% of consolidated assets no longer subject to Volcker Rule	24-May-18
	12	Section 205	Short Form Call Reports	Banks < $5 B allowed to use short form call report for Q1 and Q3 reporting	5-Nov-18
	13	Section 210	Exam Cycle	Increases asset size from $1 to $3 billion for 18-month exam cycle (for 1 and 2 rated institutions)	29-Aug-18

(1) Category 1 = U.S. Global Systemically Important Bank Holding Companies (GSIBs)
Category II => $700 B in total assets or => $75 B of cross jurisdictional activity
Category III => $250 B in total assets or =>$100B that exceed risk thresholds for STWF, nonbank assets, off-balance sheet exposure.
Category IV => $100 B in total asset and <$250 B
These categories would not apply to Foreign Banking Organizations which will be subject to their own prudential standards.

Source: EGRRCPA, CBLR NPR, Proposed Changes to Applicability Thresholds for Regulatory Capital and Liquidity Requirements NPR, and other related NPRs

Highlighted in red are the three key pending sections including Section 402 - Supplemental Leverage Ratio (SLR), Section 101 - Qualified Mortgage (QM) relief, and Section 108 – for escrow relief. Encouragingly, the fact that much of the rulemaking for EGRRCPA was proposed within six months of its passage indicates the commitment by senior regulators to implement regulatory relief on a timely basis.

Overview of Capital Frameworks Available to Banking Organizations Based on Asset Size and Risk Profile

The new legislation provides community banks with significant flexibility in their choice of capital structure between Basel III, the Small BHC Policy Statement (assets <$3 billion), or alternatively, opting out of Basel III, and complying with the new CBLR with tangible equity/tangible assets of 9.00% or more.

This flexibility is shown in Chart C below. Small banks with less than $10 billion in assets have the most capital structure alternatives to match with their business plan, risk profile, growth rate and sources of available capital. This chart also highlights the fact that banks with less than $10 billion in assets comprise 98% of the total number of banks while only about 13% of the total amount of assets. It also shows that smaller banks (<$3 billion) already have much stronger levels of TE/TA with a median of 10.5% compared to 8.4% for the GSIBs.

Chart C

Distribution of Banks by Asset Size (Consolidated BHC Level)

Institutions: Number	%	Total Assets	%	Asset Size	Capital/Liquidity Framework	TE/TA (%) Median
8	0.2%	11.1	51.2%	U.S. GSIB	Basel III with LCR, NSFR and TLAC	8.39
6	0.1%	2.1	9.8%	≥ $250 B but < U.S. GSIB	Basel III with LCR and NSFR	9.24
22	0.4%	3.2	14.8%	≥ $100 B but < $250	Basel III with modified LCR/NSFR	9.49
99	1.9%	2.5	11.5%	≥ $10 B but < $100 B	Basel III	9.29
171	3.2%	0.9	4.1%	≥ $3 B but < $10 B	TE/TA ≥ 9% OR Basel III	9.45
5,012	94.2%	1.8	8.4%	< $3 B	TE/TA ≥ 9% OR Small BHC Policy Statement OR Basel III	10.47

Number	Assets ($T)
5,318	21.7

Source: S&P Global Market Intelligence. Includes foreign banking organizations, brokers, and specialty finance. Data as of 6/30/18.

Note below in Chart D that at the bank holding company level, the Small BHC Policy Statement allows qualifying BHCs with less than $3 billion in assets to have much more debt at the holding company with a maximum of 75% debt and 25% equity. No dividends can be paid by the bank, however, until leverage returns to 1:1 or 50%. The small BHC would have the flexibility to use either Basel III or the CBLR as the capital framework at the bank level and would have to comply with those well-capitalized requirements at the bank level. **This could present some very attractive opportunities for small BHCs to borrow at the BHC level and downstream proceeds to the bank as equity** by adopting the CBLR at the bank level and avoiding Basel III restrictions, deductions and higher risk weighting.

For well-capitalized banks with $3 billion or more in assets but less than $10 billion in assets that meet qualifying criteria, the CBLR framework at the BHC level provides a potentially attractive capital framework. Common equity must comprise a majority of the capital for the CBLR. Cumulative or non-cumulative preferred equity could comprise the remaining 40%, which represents **an exciting new development for capital planning, as Basel III has not previously allowed cumulative preferred to count as tier 1 capital**. Banks in this size range have the flexibility to use either Basel III or the CBLR as the capital framework at the bank level but would ultimately have to comply on a consolidated basis with the BHC's capital requirements. This could be attractive for a BHC with substantial sub debt or trust preferred that has been down streamed to the bank. It could use Basel III at the BHC but use the CBLR at the bank level to avoid capital deductions or higher risk weighting.

All BHCs and banks with $10 billion or more in assets but less than $250 billion generally must use the standardized approach for Basel III. These banks are permitted to have 19% debt in the BHC total capital structure but are required to maintain at least 81% equity (i.e. 8.5% tier 1/10.50% total capital).

Chart D

Impact of EGRRCPA on BHC and Bank Capital Requirements and Limitations

Small BHC Policy Statement
Assets < $3B

BHC: **Maximum 75% Debt/ 25% Equity**
(50/50 permitted without dividend restrictions)

Bank:

	Basell III Well Capitalized (1)	FDIC PCA
Tier 1 Capital/ Avg. Assets Ratio	4.00%	5.00%
Common Equity/ RWA Ratio	7.00%	6.50%
Tier 1 Capital/ RWA Ratio	8.50%	8.00%
Total Capital/ RWA Ratio	10.50%	10.00%

CBLR
Assets ≥ $3B < $10B

BHC: **Maximum 40% Preferred/ 60% Equity**

Bank: **> 9.0% Tangible Equity/ Tangible Assets**

Basel III
Assets ≥ $10B < $250B

BHC: **Maximum 19% Debt/ 81% Equity**
(assumes no double leverage with 2% sub-debt out of 10.5% total capital)

Bank:

	Basell III Well Capitalized (1)	FDIC PCA
Tier 1 Capital/ Avg. Assets Ratio	4.00%	5.00%
Common Equity/ RWA Ratio	7.00%	6.50%
Tier 1 Capital/ RWA Ratio	8.50%	8.00%
Total Capital/ RWA Ratio	10.50%	10.00%

Source: Federal Reserve, OCC, and FDIC
(1) Includes 2.50% capital conservation buffer in calculation of fully phased in Basel III capital ratios.

Note that for ease of presentation, the above diagram shows banks with total assets less than $3 billion using Basel III at the bank level. Qualifying banks could also use the CBLR at the bank level. Similarly, qualifying banks with total assets of $3 billion or more but less than $10 billion may use either the CBLR or Basel III at the BHC level and either of those two capital regimes at the bank level.

Benefits and Considerations of the Three Capital Frameworks Available for Community Banks

1) Basel III (with Simplification)

In brief, all insured depository institutions operating in the U.S. are currently subject to the Basel III capital rules finalized in October 2013 and fully phased-in effective January 1, 2019 (for non-advanced approaches banks). The numerator of all the Basel III ratios is subject to 13 regulatory adjustments to common equity tier 1. Among these, the bank's investment in deferred tax assets related to timing differences, mortgage service assets, and significant investments in unconsolidated financial institutions may not exceed 10% of adjusted common equity tier 1 and may not cumulatively exceed 15%. Any amounts above these limits are deducted from common equity tier 1.

This two-step calculation process is unduly complex and burdensome and very restrictive for community banks. (See Appendix A for more detail on Step 1 and Step 2 calculations). To address this concern, in September 2017, the regulatory agencies announced a notice of proposed rulemaking (NPR) related to simplifications to Basel III capital rules (Basel III Simplification) that would increase the threshold for deduction from 10% to 25% of common equity tier 1 and eliminate the 15% cumulative cap among other changes. We expect **the results of the final Basel III simplification NPR to be released by the regulatory agencies within the next 60 days, allowing banks to more accurately evaluate the merits of this capital regime versus the other alternatives.**

Overall, the Basel III capital framework offers several benefits but carries many considerations that will affect the desirability of this capital framework for community banks with total assets less than $10 billion. As highlighted below in Chart E, Basel III offers a lower risk weighting for lower risk assets. The framework is well understood by the investors and regulators. In addition, it has limited restrictions on off-balance sheet activities, it provides flexibility to include subordinated debt and preferred stock in total capital, has no limits on amounts of SEC registered debt or equity that can be issued, and potentially allows the use of synthetic securitization strategies to lower risk weighted assets.

However, the capital deductions and higher risk weighting for High Volatility Commercial Real Estate (HVCRE) loans along with potentially higher administrative costs may make Basel III less attractive to certain community banks. If the Basel III simplification deduction limit were raised from 10% to 25% of adjusted CET1 capital, one of the main impediments to this capital framework would be substantially improved.

Chart E

Basel III Benefits and Considerations

Benefits	Considerations
o No transition based on asset size o Potentially lower weighted average cost of capital with use of tier 2 subordinated debt o Adjusted allowance for credit losses (AACL) included in tier 2 capital for up to 1.25% of risk weighed assets o Reduced risk weighting on lower risk assets o Well understood by the market and regulators o Already in compliance so no changes to staff needed o Limited use of debt lowers default risk o No restrictions on amt. of SEC registered debt or equity o No limitations on significant off-BS activities through non-bank subs	o Subject to Basel III capital deductions (currently at 10% of CET1 for DTAs, MSAs and investment in UFIs) o Subject to Basel III adverse risk weighting on certain types of loans and activities o Higher risk weighting for HVCRE lending o Higher administrative cost to track and report Basel III requirements

2) The Small Bank Holding Company Policy Statement

The Federal Reserve Board initially implemented the Policy Statement in 1986. Since then, the qualifications and ongoing requirements of the Policy Statement have not changed other than (i) an increase in asset size from less than $150 million in 1986 to less than $1 billion in 2015 and then to $3 billion under EGRRCP and (ii) the inclusion of savings and loan holding companies. A summary of the benefits and considerations to a community bank holding company with less than $3 billion in assets is provided below in Chart F. While this capital regime allows for substantially more debt and lower after-tax cost of capital, it additionally comes with a maximum size limit of $3 billion in assets, limitations on non-bank and off balance sheet activities, as well as dividend restrictions above 1:1 leverage.

Chart F

Small BHC Policy Statement Benefits and Considerations

Benefits	Considerations
o Lowest ATX cost than preferred or common o Long term window for debt repayment o No regulatory filing requirement for senior debt o Debt can be used to faciliate financing for M&A	o Maximum permitted asset size ($3 Billion) o Ability to replace debt with common or preferred stock when reach $3 billion in assets o No significant non-bank activities (1) o No significant off-BS activities through non-bank subs (1) o No material amt of SEC registered debt or equity (ex. TPS) (2) o BHC debt must be repaid within 25 years o Max debt-to-equity ratio of 3.0 (75% debt) o Debt < .30:1 (25% debt) or less within 12 years o Each subs bank well capitalized under Basel III rules o No dividends until the D/E ratio reduced to 1.0:1 or less o Potentially exposes the bank to default risk during periods of financial distress

(1) The determination of whether a BHC engages in significant non-bank activities will continue to depend on a consideration of the size of the activities, and the condition of the BHC and the subsidiary depository institution.

(2) Determinations of materiality are made by the Fed on a case-by-case basis based on: the number and type of classes and series of stock issued; the holding company's market capitalization; the number of outstanding shares; the average trading volume; the holding company's history of issuing equity and debt securities, including whether the entity has issued any other securities that are not registered with the SEC (e.g., privately-placed securities); the nature and distribution of ownership; whether the securities are listed on a national exchange; whether the holding company qualifies as a "smaller reporting company" pursuant to the SEC's regulations and related interpretations; and the amount, type, and terms of any debt instruments issued by the entity.

The Federal Reserve will make a case-by-case determination on the qualifications of a BHC to use the Policy Statement. Those institutions that have off-balance sheet activities conducted through a non-bank subsidiary or have issued SEC-registered debt or equity (excluding TPS) should check with their regulators to ensure they will qualify. The Federal Reserve clearly recognizes that ". . . a high level of debt at the parent holding company impairs the ability of a bank holding company to provide financial assistance to its subsidiary bank(s) and, in some cases; the servicing requirements on such debt may be a significant drain on the resources of the bank(s).

Nevertheless, the Board has recognized that the transfer of ownership of small banks often requires the use of acquisition debt. The Board, therefore, has permitted the formation and expansion of small bank holding companies with debt levels higher than would be permitted for larger holding companies." [9]

As shown previously, there are 5,012 banking institutions with less than $3 billion in assets as of June 30, 2018. These banks represent about 94% of the 5,318 total U.S. banking institutions and approximately 8.3% of the $21.7 trillion in total assets. As such, assuming these institutions either had a BHC or could add a BHC structure if desired, the Policy Statement would provide capital structure flexibility for almost 94% of total banking institutions in the U.S. Nevertheless, the ongoing Policy Statement requirements and asset size limit mean that an exit strategy from the Policy Statement to either Basel III or the CBLR regime should also be considered.

[9] Federal Register. Vol 80, No. 72/ Wednesday, April 15, 2015. Page 20154.

3) Community Bank Leverage Ratio (CBLR)

With a focus on offering well-capitalized community banks a simple capital framework, a new community bank leverage ratio consisting of 9% tangible equity/tangible assets for banks and BHCs with less than $10 billion in assets was included in EGRRCPA. A summary of benefits and considerations is provided below in Chart G.

Common equity must comprise the majority of tangible equity that can include both cumulative and non-cumulative preferred stock. CBLR tangible equity consists of total bank equity capital (or BHC as applicable) less: (i) accumulated other comprehensive income (AOCI), (ii) all intangible assets (other than MSAs), and (iii) DTAs, net of any related valuation allowance. The CBLR excludes minority interest from tangible equity.

Other qualifying criteria for banks to use the CBLR framework include: (i) less than $10 billion of total consolidated assets, (ii) total off-balance sheet exposures of less than 25% of total consolidated assets, (iii) total trading assets and liabilities less than 5% of total consolidated assets, (iv) mortgage servicing assets (MSAs) less than 25% of CBLR tangible equity, (v) temporary difference DTAs of less than 25% of CBLR tangible equity, and (vii) the banking organization is not subject to any written agreement, order or capital directive.

If the bank or BHC maintains capital in excess of the CBLR of 9.00%, it would be deemed to comply with the leverage and risk-based capital requirements of Basel III and the bank would be considered well capitalized under the prompt corrective action regime (assuming an acceptable risk profile). As such, the community bank could "opt out" of other Basel III requirements and not be required to report risk-based capital ratios or the tier 1 leverage ratio. Updates to other banking regulations and guidance such as PCA standards, FDIC deposit insurance assessments, brokered deposit and interest rate restrictions, and CRE concentration limits will be required.

Chart G

Community Bank Leverage Ratio Benefits and Considerations

Benefits

- 9% capital ratio lower than 10.50% required for Basel III
- Permanent capital with no default risk
- Cumulative and non-cumulative preferred permitted as long as common equity is majority of tangible equity
- Permanent capital with no default risk
- Limited restrictions on activities to use Leverage Ratio
- Not subject to Basel III capital penalties
- Not subject to Basel III adverse risk weightings for certain lending and other activities
- May be able to reduce administrative costs due to simpler regulatory filing and process
- Much simpler capital regime to explain to regulators, investors, customers and employees

Considerations

- Maximum permitted asset size ($10 Billion) and must be prepared to meet Basel III requirements when > $10 B
- 9% minimum TE/TA level is substantially above 7% Basel III CET1/RWA and 8.50% Tier 1/RWA
- Higher ATX cost of capital than debt with no tax benefit
- No benefit in tier 2 capital for allowance of credit losses
- Tangible equity excludes AOCI, all intangibles other than MSAs, and DTAs net of any related valuation allowance
- Off-balance sheet exposures limited to 25% of total assets
- MSAs limited to 25% of tangible equity
- Temporary difference DTAs limited to 25% of tangible equity
- Less capital flexibility to include tier 1 qualifying TPS or sub debt unless kept at BHC and downstream as TE to the bank
- No benefit for lower risk weighting on single family loans and low LTV loans
- Higher tangible equity levels reduce return on common equity unless preferred is partially substituted for common
- Ability to meet Basel III requirements when reach $10 billion in assets
- No grace period permitted to show compliance with CBLR requirements following a business combination

While the CBLR may offer a very attractive, simple alternative for many community banks that have high risk weighted assets or substantial Basel III deductions from common equity tier 1, there is a trade-off on basing the capital ratio on average tangible assets compared to risk weighted assets. Banks would have the flexibility to change capital frameworks. Nevertheless, the regulators expect that any changes will be limited and well explained. Banks will generally be granted a two-quarter grace period to transition from the CBLR to other capital frameworks if they no longer meet the CLBR qualifying criteria. There is no grace period permitted in the case of a business combination. The buyer would be required to provide pro-forma capital ratios showing compliance with the applicable capital regime with the merger application.

The CBLR ratio was set at 9% TE/TA to be broadly available to well capitalized community banks. As shown below in Chart H, for insured depository institutions with less than $3 billion in assets, we estimate that 81% qualified to use the CBLR at 9% TE/TA, 62% qualified to use the CBLR at 10%, and 45% qualified at 11%. For the larger insured depository institutions with $3 billion or more in assets but less than $10 billion, **we estimate that only 66% qualified to use the CBLR at 9% TE/TA, 43% qualified to use the CBLR at 10%, and 27% qualified at 11%**. This means that many fewer banks in this size range would qualify to use the CBLR if they factor in a capital cushion above the 9% threshold and likely one of the reasons that the Independent Community Bankers of America have advocated that the CBLR base should be set at 8% rather than 9%.

Chart H

CBLR Qualification Sensitivity from 9% to 11% TE/TA

Insured Depositories < $3B

		CBLR TE/TA (%)				
Total Institutions	CBLR Eligible	≥ 9.0	≥ 9.5	≥ 10.0	≥ 10.5	≥ 11.0
5,274	**5,121**	**4,292**	**3,783**	**3,290**	**2,799**	**2,377**
100%	97%	81%	72%	62%	53%	45%

Insured Depositories ≥ $3B < $10B

		CBLR TE/TA (%)				
Total Institutions	CBLR Eligible	≥ 9.0	≥ 9.5	≥ 10.0	≥ 10.5	≥ 11.0
185	**161**	**122**	**102**	**80**	**58**	**50**
100%	87%	66%	55%	43%	31%	27%

Source: S&P Global Market Intelligence as of June 30, 2018, CBLR NPR (bank level depository institutions)

As will be discussed in more detail later, the required adoption of CECL and ASC 842 will create near term volatility in required equity thereby encouraging the maintenance of a larger capital cushion. By explicitly permitting the use of both cumulative and non-cumulative preferred stock in the composition of tangible equity, the regulators have provided additional capital flexibility for community banks that want to supplement tangible equity with preferred stock. In addition, by permitting different capital regimes at the bank holding company level vs. the bank level, the regulators permit BHCs to use trust preferred, sub debt or senior debt "down streamed" as equity to the bank level to potentially meet the targeted capital cushion for the CBLR. Otherwise, this hybrid capital, tier 2 and other long-term debt instruments would have limited value in the CBLR framework. While the CBLR may open up the market for more preferred issuance by community banks, this may take time to more fully develop as investors currently prefer larger regional and money center bank rated issuances.

Changes in stress testing, liquidity and enhanced prudential standards applicable to large U.S. banks.

While banks with $10 billion or more in assets remain subject to Basel III, Section 401 of EGRRCPA granted those banks with less than $250 billion in assets relief from company-run stress tests (following an 18-month delay for banks between $100 and $250 billion in assets and excluding foreign banking organizations >$100 B). We initially viewed this development as positive for larger bank M&A activity because it would free approximately 107 banks (shown below in Chart I) from stress testing and allow them to pursue M&A and other capital management strategies.

Chart I

Summary of EGRRCPA Bank Waterfall for Regulatory Relief

SIFIs (8 banks)	JPMorgan Chase & Co.			
	Bank of America Corporation			
	Citigroup Inc.			
	Wells Fargo & Company			
	Goldman Sachs Group, Inc.			
	Morgan Stanley			
	Bank of New York Mellon Corporation			
>=$250 but<SIFI (3 banks)	U.S. Bancorp			
	PNC Financial Services Group, Inc.			
	Capital One Financial Corporation			
>=$100 but<$250 (12 banks)	BB&T Corporation			
	SunTrust Banks, Inc.			
	American Express Company	Northern Trust Corporation		
	Ally Financial Inc.	Regions Financial Corporation		
	Citizens Financial Group, Inc.	M&T Bank Corporation		
	Fifth Third Bancorp	Huntington Bancshares Inc.		
	KeyCorp	Discover Financial Services		
>=$50 but<$100 (8 banks)	Synchrony Financial	Comerica Incorporated		
	First Republic Bank	**Zions Bancorporation**	SVB Financial Group	
	BBVA Compass Bancshares, Inc.	E*TRADE Financial Corporation	New York Community Bancorp, Inc.	
>=$10 but<$50 (87 banks)	CIT Group Inc.	Umpqua Holdings Corporation	State Farm Bank, FSB	
	Popular, Inc.	Investors Bancorp, Inc.	Cathay General Bancorp	First Interstate BancSystem, Inc.
	Signature Bank	Commerce Bancshares, Inc.	Simmons First National Corporation	FCB Financial Holdings, Inc.
	People's United Financial, Inc.	PacWest Bancorp	Washington Federal, Inc.	Bremer Financial Corporation
	First Horizon National Corporation	Pinnacle Financial Partners, Inc.	Midland Financial Co.	Great Western Bancorp, Inc.
	Mizuho Americas LLC	Utrecht-America Holdings, Inc.	Home BancShares, Inc.	International Bancshares Corporation
	CIBC Bancorp USA Inc.	TCF Financial Corporation	Hope Bancorp, Inc.	Berkshire Hills Bancorp, Inc.
	East West Bancorp, Inc.	Prosperity Bancshares, Inc.	First Midwest Bancorp, Inc.	Glacier Bancorp, Inc.
	First Citizens BancShares, Inc.	Bank OZK	South State Corporation	Cadence Bancorporation
	BOK Financial Corporation	Western Alliance Bancorporation	BCI Financial Group, Inc.	Heartland Financial USA, Inc.
	Associated Banc-Corp	UMB Financial Corporation	Third Federal Savings and Loan Asso	Eastern Bank Corporation
	F.N.B. Corporation	Chemical Financial Corporation	First Financial Bancorp.	Ameris Bancorp
	Synovus Financial Corp.	First National of Nebraska, Inc.	Hilltop Holdings Inc.	Customers Bancorp, Inc.
	Sterling Bancorp	Fulton Financial Corporation	Trustmark Corporation	WesBanco, Inc.
	BankUnited, Inc.	MB Financial, Inc.	Comenity Bank	TowneBank
	Cullen/Frost Bankers, Inc.	United Bankshares, Inc.	Apple Financial Holdings, Inc.	Community Bank System, Inc.
	Valley National Bancorp	Arvest Bank Group, Inc.	Union Bankshares Corporation	Renasant Corporation
	IBERIABANK Corporation	FirstBank Holding Company	Hawaiian Electric Industries, Inc.	CenterState Bank Corporation
	Wintrust Financial Corporation	Flagstar Bancorp, Inc.	Central Bancompany, Inc.	Pinnacle Bancorp, Inc.
	Hancock Whitney Corporation	Old National Bancorp	Columbia Banking System, Inc.	Banner Corporation
	Texas Capital Bancshares, Inc.	BancorpSouth Bank	United Community Banks, Inc.	Banc of California, Inc.
	Webster Financial Corporation	Bank of Hawaii Corporation	First BanCorp.	Independent Bank Group, Inc.

107 banks => $10 B and <$250 B with potential for M&A

Source: EGRRCPA, S&P Global Market Intelligence, excludes FBOs >$100B, brokers, and specialty finance (As of June 30, 2018)

However, a closer view of the NPR for Section 401 announced on October 31, 2018 suggests that the new risk buckets could become an impediment to large bank M&A. This NPR added a risk measure (in addition to size) with four categories of risk roughly based on the Systemically Important Financial Institution (SIFI) definitions of risk. These include: cross-jurisdictional activity, weighted total short-term wholesale funding (STWF), nonbank assets, and off-balance sheet exposures. Based on total asset size and the level of risk in these four categories, the regulators identified 24 U.S. banking organizations above $100 billion in assets and placed them into four risk categories:

- Category I - U.S. Global Systemically Important Bank Holding Companies (GSIBs) and their subsidiary banks,
- Category II – total assets of $700 billion or more or $75 billion or more of cross-jurisdictional activity,
- Category III – total assets of $250 billion or more in total assets or $75 billion or more in any of the following risk indicators: STWF, nonbank assets or off-balance sheet exposure, and
- Category IV - total assets of $100 billion or more but do not meet any of the thresholds for Categories I through III.

As such, the $75 billion risk thresholds will likely become a binding constraint on larger bank M&A transactions. Category IV banks would avoid exceeding the $75 billion threshold for STWF, nonbank assets off-balance sheet exposure that would push them to Category III. Category III banks, such as U.S. Bancorp, would stay below the $75 billion threshold for cross-jurisdictional activity to avoid Category II status with higher regulatory scrutiny.

Chart J

Regulatory NPR Risk Categories with Calculations of Four Risk Components

Category	Asset Size Rank	Financial Institution	Total Assets ($000)	Cross-Jurisdictional Acitivity ($000s)(1)	Total short-term wholesale funding ($000s)(2)	Nonbank assets ($000s)(3)	Off Balance Sheet Exposure ($000s)(4)
I	3	Citigroup Inc.	1,912,334,000	1,872,886,000	342,651,000	41,012,000	582,025,300
I	1	JPMorgan Chase & Co.	2,590,050,000	1,419,849,000	457,621,850	1,150,000	712,201,000
I	5	Goldman Sachs Group, Inc.	968,617,000	799,885,000	309,449,900	70,920,000	443,934,000
I	2	Bank of America Corp.	2,291,858,000	745,768,000	401,455,800	4,920,000	589,991,000
I	6	Morgan Stanley	875,875,000	682,352,000	318,135,300	33,156,589	230,646,400
I	4	Wells Fargo & Company	1,879,700,000	254,473,693	192,565,364	15,856,000	332,905,392
I	12	State Street Corporation	248,397,792	245,879,000	40,966,071	6,943,982	8,955,995
I	10	Bank of New York Mellon Corporation	352,928,000	243,409,000	85,769,900	6,085,000	22,472,900
II	20	Northern Trust Corporation	135,106,246	112,055,000	37,792,448	162,119	5,085,772
III	7	U.S. Bancorp	461,329,000	55,849,000	25,982,000	2,545,030	105,294,100
III	8	PNC Financial Services Group, Inc.	380,796,207	12,054,000	20,764,820	1,724,947	66,229,496
III	9	Capital One Financial Corporation	363,989,302	11,441,407	11,334,733	1,846,954	60,446,889
III	11	Charles Schwab Corporation	261,882,000	12,588,000	51,270,150	5,454,000	5,460,000
IV	13	BB&T Corporation	222,681,000	1,446,000	21,443,650	1,452,000	27,339,000
IV	14	SunTrust Banks, Inc.	207,881,500	4,046,198	15,297,979	1,415,524	44,650,151
IV	15	American Express Company	184,848,000	46,077,000	9,652,800	451,084	21,638,000
IV	16	Ally Financial Inc.	171,345,000	1,140,000	9,761,550	7,273,000	4,455,200
IV	17	Citizens Financial Group, Inc.	155,838,315	2,564,000	11,620,281	76,730	25,541,996
IV	18	Fifth Third Bancorp	140,695,256	3,077,000	10,845,904	-	30,870,408
IV	19	KeyCorp	138,164,802	2,501,000	9,160,478	1,004,348	30,544,619
IV	21	Regions Financial Corporation	124,789,250	1,046,579	1,963,711	286,519	21,934,044
IV	22	M&T Bank Corporation	118,426,053	367,297	10,489,718	39,439	13,791,604
IV	23	Huntington Bancshares Incorporated	105,358,398	1,775,162	5,344,276	113,431	11,000,515
IV	24	Discover Financial Services	102,751,300				

Numbers highlighted in red illustrate levels exceeding the $75 B threshold

(1) Calculated as the sum of cross-jurisdictional assets and cross-jurisdictional liabilities, calculated in accordance with the instructions to the FR Y-15 reporting form.

(2) Based on the calculation for weighted short-term wholesale funding used for purposes of the GSIB surcharge rule consisting of wholesale or retail brokered deposits and sweep accounts with a remaining maturity of 1 year or less. Categories of STWF are then weighted based on four residual maturity buckets, the asset class of collateral (if any), and the characteristics of the counterparty.

(3) Based on the average amount of equity investments in nonbank subsidiaries including Edge Act or Agreement Corporations but excluding nonbank assets held in a savings association.

(4) As currently reported on the FR Y-15 by BHCs with more than $100 billion in assets, this measure would define total exposure as on-balance sheet assets plus certain off-balance sheet assets, including derivative exposures, repo-style transactions and other off-balance sheet exposures such as loan commitments.

The eight GSIB organizations remained unchanged but Northern Trust moved up to be a Category II bank due to its high level of cross-jurisdictional activity that exceeds $75 billion. U.S. Bancorp is well below the $700 billion asset threshold to move from Category III to Category II but has cross-jurisdictional activity of $56 billion that could push them to the next category if they exceed $75 billion. Banking organizations that remain in Category III or IV can avoid higher levels of stress testing, capital, and liquidity requirements as highlighted below in Chart K.

Chart K

Revised Stress Testing, Liquidity and EPS Requirements

		Capital			Liquidity		
Category	Stress Testing	TLAC	B3 Risk Based Capital	Leverage	LCR	NSFR	Internal
Category I (8 banks)	Annual CCAR *(qualitative & quantitative)* Annual Supervisory Annual Company Run Annual Capital Plan	TLAC/ Long term Debt	Advanced Approaches GSIB Surcharge Countercyclical Buffer No opt-out of AOCI	Enhanced Supplementary Leverage Ratio	100% LCR	100% NSFR	Monthly stress test
Category II (1 bank)	Annual CCAR *(qualitative & quantitative)* Annual Supervisory Annual Company Run Annual Capital Plan	N/A	Advanced Approaches Countercyclical Buffer No opt-out of AOCI	Supplementary Leverage Ratio	100% LCR	100% NSFR	Monthly stress test
Category III (4 banks)	Annual CCAR *(qualitative & quantitative)* Annual Supervisory Annual Company Run Annual Capital Plan	N/A	Countercyclical Buffer Allow opt-out of AOCI	Supplementary Leverage Ratio	70 to 85% LCR	70 to 85% NSFR	Monthly stress test
Category IV (11 banks)	Bi-Annual CCAR *(quantitative only)* Bi-Annual Supervisory Annual Capital Plan	N/A	Allow opt-out of AOCI	Leverage Ratio	N/A	N/A	Quarterly Stress Test

Source: Federal Reserve

This does not mean that banks with more than $100 billion in assets would direct their M&A strategy simply to avoid a higher level of regulatory scrutiny but rather that such institutions must factor in the cost of such higher scrutiny in any analysis of the merger. Similarly, smaller banks that are not currently subject to this constraint (but may consider M&A activity with a $100 billion+ bank in the next 3 to 5 years) would want to be aware of how their strategic business decisions may impact their risk profile in the four areas of cross jurisdictional activity, total short-term wholesale funding, nonbank assets, and off-balance sheet exposures.

Note that the NPR for Section 401 of EGRRCPA is subject to a comment period ending on January 22, 2019 and **there may be changes before final implementation**. The regulators also requested feedback on an alternative scoring methodology using a single, comprehensive score to determine risk categories and tailor prudential standards for large but not globally systemic, banking organizations. While this scoring model is not being proposed to be implemented in the near term, it does indicate the direction that the regulatory agencies are heading to evaluate and define risk on a more quantitative basis using measures other than asset size.

Overview of CECL and ASC 842 requirements and potential impact from the adoption of each

The financial crisis of 2008 triggered the passage of the Dodd Frank Act in 2010 (DFA), Basel III in 2013, and other regulations to protect consumers and avoid a future financial crisis. However, the pendulum of regulation had swung too far in many areas and EGRRCAP was passed by Congress to simplify regulation for community banks and appropriately tailor stress testing, liquidity management and EPS for larger banks. On the accounting side, there had been no such modification of regulation coming out of the financial crisis and two major accounting changes are just now being implemented – CECL and ASC 842. However well-intentioned these accounting changes may have been as they were developed from 2008 to 2016, many bankers would argue that the complexity of implementation is overkill for banking safety and soundness due to the higher level of capital and liquidity already required by DFA and Basel III. For CECL in particular, the descriptive phase "approximately right or precisely wrong" comes to mind.

Nonetheless, due to concerns about the lack of sufficient loan loss reserves to cover realized losses during the 2008 financial crisis, the Financial Accounting Standards Board (FASB) launched a multi-year effort to revise the accounting for credit losses under U.S. generally accepted accounting principles (GAAP). FASB introduced Accounting Standards Update (ASU) No 2016-13 with current expected credit losses methodology (CECL) that replaces the incurred loss methodology for financial assets measured at amortized cost, replaces purchased credit-impaired asset (PCI) with purchased credit deteriorated assets (PCD) and modifies the treatment for credit losses on available-for-sale (AFS) debt securities.

CECL requires U.S. banking institutions to estimate lifetime losses on all loan and lease exposures and recognize those losses beginning in 2020 for SEC filers, 2021 for Public Business Entities (PBEs), and 2022 for all others. At the beginning of the relevant fiscal year of adoption, the banking organization will record a one-time adjustment to its credit loss allowance for the difference between the amount of credit loss allowed under the incurred loss approach and the amount of expected lifetime losses required under CECL. The amount of adjustment would be recognized through a reduction in retained earnings net of offsetting entries for deferred tax assets.

These changes will reduce retained earnings, increase DTAs that are deducted from capital above threshold levels, and increase allowance for credit losses (ACL). With the final NPR on CECL announced on December 21, 2018, the regulators introduced a new regulatory accounting term -- Adjusted Allowances for Credit Losses (AACL) -- that is intended to only apply to those losses that have been charged against earnings or retained earnings. AACL would include expected losses on loans, held-to-maturity debt, net investment in leases, and off-balance sheet exposures. It would not include credit loss allowances related to AFS securities or PCD assets. **AACL amounts above 1.25% of risk-weighted assets (standardized approach) represent "stranded reserves" not permitted to be included in tier 2 capital**.[10]

Recognizing that this one-time charge to retained earnings and increase in DTAs would negatively impact bank regulatory capital ratios, the regulatory agencies agreed to allow banking organizations the option to amortize the CECL provision over three years beginning in the quarter of initial CECL adoption. This deferral election must be concurrent with CECL adoption and would only apply to regulatory reporting. The GAAP reduction to retained earnings must be recognized in the year of CECL adoption. For regulatory reporting purposes, this three-year amortization of the loss will increase retained earnings and average consolidated assets, decrease temporary difference DTAs, and decrease the accumulated credit loss thereby complicating financial reporting for community and large banks. Note that any transitional amounts of an acquired banking organization that has elected deferral will not be eligible for inclusion in the calculation of regulatory capital ratios for the resulting pro forma banking organization. This **"M&A penalty" must be factored into the analysis of business combinations for banking organizations following the adoption of CECL**.[11] As a practical matter, M&A buyers already assume a credit mark for future losses against the seller's loan and securities portfolio potentially lessening any adverse impact of the CELC acceleration.

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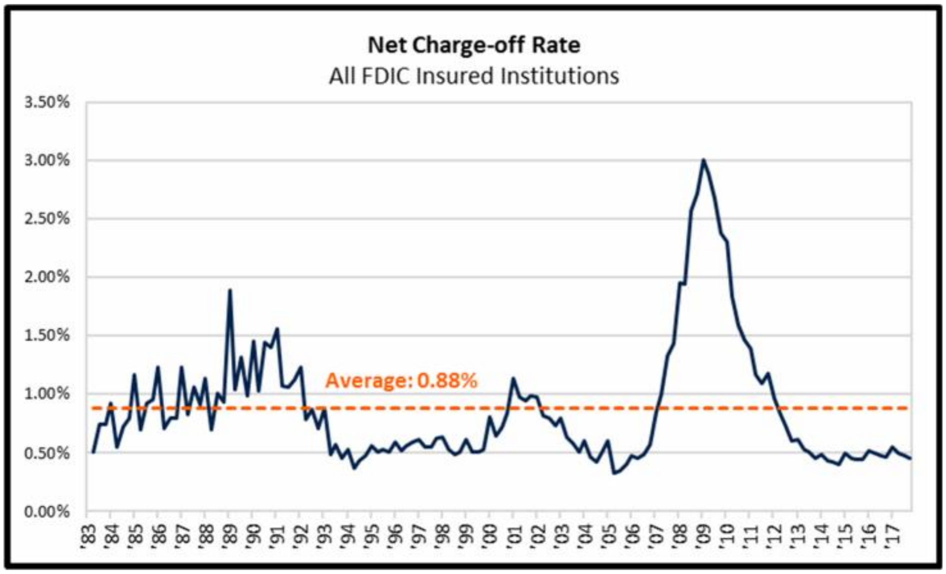
10 Department of Treasury Office of the Comptroller of the Currency, Federal Reserve System, Federal Deposit Insurance Corporation. Regulatory Capital Rule: Implementation and Transition of the Current Expected Credit Losses Methodology for Allowances and Related Adjustments to the Regulatory Capital Rule and Conforming Amendments to Other Regulations. December 21, 2018. Pages 14-15.

11 Department of Treasury Office of the Comptroller of the Currency, Federal Reserve System, Federal Deposit Insurance Corporation. Regulatory Capital Rule: Implementation and Transition of the Current Expected Credit Losses Methodology for Allowances and Related Adjustments to the Regulatory Capital Rule and Conforming Amendments to Other Regulations. December 21, 2018. Pages 25-26.

Despite the complication of implementing CECL, the regulatory agencies have declined to provide an approved formula or mandate a single approach that institutions should follow when implementing CECL. **For many institutions that have had limited net charge-offs over the past 7 years, this creates further uncertainty about the loss history to use** when determining expected lifetime losses. As a result, such institutions may be required to use industry average loss rates despite better than industry average incurred losses. To determine a high-level estimate of the potential CECL charge for the industry, we examined FDIC loan loss data back to 1984 to calculate an annualized long-term average net charge off rate (NCO) rate of 0.88% (see chart L below).

Chart L

Historical FDIC Loan Net Charge-off Rate



Source: FDIC, Sandler O'Neill

We further assumed 3.5 years weighted average life for total industry loans to calculate a cumulative expected net charge off rate on average loans of 3.08%. By applying this loss rate to the industry average loans of almost $10 trillion at June 30, 2018, we determined the pro forma expected required reserves to be $301 billion. With current reserves of $123 billion, **the required reserves would be an additional $178 billion or $141 billion after tax**. The tax-effected charge from CECL would lower the industry TE/TA ratio from 9.29% to roughly 8.54% representing a drop of about 75 basis points in tangible equity. Pro forma reserves to loans would be increased about 181 BP to roughly 3.06%. See Chart M for below for details.

Chart M

Estimated Industry CECL

As of 2Q 2018			**Amounts in Millions of USD**
Assumptions			
Long Term Average NCO Rate	0.88% **(a)**		
Assumed Average Life of Loans	3.5 yrs **(b)**		
Expected Losses on Average Loans	3.08% **(a x b)**		
Change in Reserves under CECL	**Current**	**Pro Forma**	**Change**
Total Average Loans	$ 9,794,371	$ 9,794,371	
Total Reserves	$ 123,420	$ 301,429	$ 178,008
		Assumed Tax Rate	21%
		After Tax Impact to Equity and Assets	$ 140,627
Pro Forma Capital and Reserves under CECL	**Current**	**Pro Forma**	**Impact**
Tangible Equity	$ 1,592,016	$ 1,451,390	
Tangible Assets	$ 17,141,055	$ 17,000,428	
Tangible Equity/ Tangible Assets	9.29%	8.54%	**(75) bps**
Reserves/ Loans	1.25%	3.06%	**181 bps**

Source: FDIC, Sandler O'Neill
Note: Bank level data

Of course, the actual CECL charge for any particular bank will vary based on that institution's loan mix, loss history and life of loan among other factors. Chart N below shows the impact on banking industry tangible equity/tangible assets ratios from varying the level of NCO from 20 BP to 140 BP per year and average loan life from one to five years. With the base case assumption of 88 BP NCOs and 3.5 year average life, the decline in TE/TA ratio of roughly 75 BP and increase reserves of 181 BP is highlighted. Note that the loss assumption is highly sensitive to assumed average loan life. With the same charge-off rate of 88 BP, a reduction in average loan life from 3.5 to 2 years would cause the TE/TA ratio to decline from about 75 BP to 20 BP. As such, banks will have an incentive to shorten average loan life going forward to lessen the impact of CECL. The change in the range of potential loss from CECL based on variance in assumptions reinforces the need for banking institutions to provide a capital cushion when developing a plan for capital needs from 2019 and beyond.

Chart N

CECL Potential Impact to Tangible Equity/Tangible Assets Ratio (BPS)

Average Loan Life	NCO Rate 0.20%	0.40%	0.60%	0.88%	1.00%	1.20%	1.40%
1.0	43	35	27	16	11	2	(6)
1.5	39	27	15	(2)	(10)	(22)	(35)
2.0	35	19	2	(20)	(30)	(47)	(63)
2.5	31	11	(10)	(39)	(51)	(72)	(93)
3.0	27	2	(22)	(57)	(72)	(97)	(122)
3.5	23	(6)	(35)	(75)	(93)	(122)	(152)
4.0	19	(14)	(47)	(93)	(114)	(147)	(181)
4.5	15	(22)	(59)	(112)	(135)	(173)	(211)
5.0	11	(30)	(72)	(130)	(156)	(198)	(241)

CECL Potential Impact on Reserves to Loans (BPS)

Average Loan Life	NCO Rate 0.20%	0.40%	0.60%	0.88%	1.00%	1.20%	1.40%
1.0	(105)	(85)	(66)	(38)	(26)	(6)	14
1.5	(95)	(66)	(36)	6	24	54	83
2.0	(85)	(46)	(6)	50	74	113	153
2.5	(76)	(26)	24	93	123	173	223
3.0	(66)	(6)	54	137	173	232	292
3.5	(56)	14	83	181	223	292	362
4.0	(46)	34	113	224	272	352	431
4.5	(36)	54	143	268	322	411	501
5.0	(26)	74	173	312	372	471	570

Similarly, to address concerns that off-balance sheet operating lease liabilities were not being properly factored into credit evaluation, FASB issued ASU 2016-02 Leases (Topic 842) otherwise known as ASC 842. Operating leases will now be added back to the balance sheet through the present value of a right of use asset (risk-weighted 100%) offset by the present value of the lease liability. Gains on the sale and leaseback of property are recognized upfront rather than being amortized over the life of the lease. These changes from ASC 842 are effective beginning in 2019 for PBEs, and 2020 for non-PBEs.

There are currently approximately 90,000 bank locations in the U.S. representing branches, headquarters buildings and administrative and other offices. Operating leases are not currently required to be disclosed in the call report but are disclosed in the footnotes for GAAP financial statements and are included in SEC disclosures. To estimate the impact of the addition to the balance sheet of the ROU asset and lease liability for operating leases, we reviewed either (a) management estimates provided in the most recent (2018 Q3) 10-Qs or (b) the net present value of lease payments as provided in the most recent (2017) 10-K for 913 pubic reporting companies.

As shown below in Chart O, we included all banks over $10 billion in assets (except for foreign banking organizations) and used a random sampling for those banks below $10 billion in assets. Through this process, we covered 80% (BHC level) and sampled 73% of U.S. banking assets (BHC level). For the sampled assets, the operating lease commitments totaled $73.2 billion with a present value of ROU asset of $58.3 billion (assuming a 5% discount rate). Assuming CET1 capital and risk weighted assets remain constant except for the additional ROU asset, the average change in CET1 capital ratio was approximately 6.4 basis points. If we apply this 6.4 BP per financial institution to the $21.7 trillion in total banking assets and $14.9 trillion in total risk weighted assets, the total capital need to avoid reduction in CET1 ratios for the industry approximates a modest $9.5 billion.

Chart O

Impact of ASC 842 Adoption on CET1 Ratio

			Sampled Institutions									
Asset Buckets	Total # of Institutions	Total Assets ($000s)	Sample Size	Sample Total Assets ($000s)	Operating Lease Commitments ($000s)	Total Est. ROU Assets ($000s)	CET 1 ($000s)	Current RWAs ($000s)	Pro Forma RWAs ($000s)	Current CET1 Ratio (%)	Pro Forma CET1 Ratio (%)	Change (bps)
>$250B	10	12,077,196,000	10	12,077,196,000	53,629,000	42,352,986	891,837,499	7,589,399,889	7,631,752,875	11.75%	11.69%	(6.52)
$100B - $250B	15	2,341,138,000	12	1,869,955,253	9,483,200	7,334,585	150,220,694	1,420,197,452	1,427,532,037	10.58%	10.52%	(5.43)
$25B - $100B	28	1,178,152,313	27	1,089,397,651	6,072,869	5,276,458	95,816,028	836,154,485	841,430,943	11.46%	11.39%	(7.19)
$10B - $25B	52	800,040,715	49	757,771,531	3,119,017	2,647,795	70,502,731	589,141,486	591,789,281	11.97%	11.91%	(5.35)
$3B - $10B	115	628,824,903	16	97,667,917	649,689	522,983	8,776,530	77,984,136	78,507,119	11.25%	11.18%	(7.50)
$1B - $3B	184	306,776,797	18	30,776,576	183,915	159,009	2,970,384	24,548,011	24,707,020	12.10%	12.02%	(7.79)
<$1B	509	215,729,239	25	10,796,803	61,347	50,632	944,334	7,898,905	7,949,537	11.96%	11.88%	(7.61)
Sample Average	**913**	**17,547,857,967**	**157**	**15,933,561,731**	**73,199,037**	**58,344,448**	**1,221,068,200**	**10,545,324,364**	**10,603,668,812**	**11.58%**	**11.52%**	**(6.37)**
											Extrapolated Impact	**(6.44)**

Source: S&P Global Market Intelligence, company reports, Sandler O'Neill
Note: Universe consists of U.S. bank & thrift companies as defined by S&P. Sample includes all banks over $10B in assets, and random sampling under $10B in assets.

Note: Right-of-use assets are either (a) management estimates provided in most recent (2018 Q3) 10-Qs or (b) NPV of future operating lease obligations as provided in most recent (2017) 10-Ks and annual reports (assuming a 5% discount rate and conservatively discounting "thereafter" payments as lump sum in the final period). Other data as of 2018 Q2

More positively, a potential benefit from the adoption of ASC 842 is the ability to recognize gains upfront on the sale-leaseback of property. Previously such gains were amortized over the life of the lease. Depreciated assets or assets located in highly desirable markets are those most likely to attract premium pricing. For the sale-leaseback transaction to be recognized as a sale, control of the property must fully transfer to the buyer that takes on the risks and rewards of owning the property. This represents an alternative for banks to monetize off-balance sheet value into retained earnings to offset the CECL charge or the reduction in capital ratios from the add-back of operating leases.

Cap rates for long-term bank leases are still very attractive relative to historical levels. Investors favor the net lease bank sector due to the credit of the tenants and the potential for rental increases. There has also been limited new supply of branches with a decline in the total number of branch locations. But there is still a need for locations that meet customer needs and demographics. JP Morgan and Bank of America reinforced this point with their January 2018 and February 2018 announcements of plans to open 400 and 500 new branches, respectively.[12][13] These efforts are part of an overall plan to add technology, renovate branches and layouts, and provide a physical storefront for expansion into new markets (such as Washington, D.C., Boston and Philadelphia for JP Morgan). With the change in ASC 842 that will now allow banks to monetize off-balance sheet value into retained earnings, bank management teams and Boards should review their owned property in the context of long-term needs, growth plans, and potential to realize gains on sale.

[12] JP Morgan press release. JPMorgan Chase Makes Long-Term U.S. Investment in Employees, Branch Expansion and Local Economics Growth. January 23, 2018.
[13] Kristin Broughton. American Banker. B of A is Latest Big Bank to Announce Aggressive Branch Expansion. February 26, 2018.

Forward-looking playbook for the convergence of EGRRCPA simplification with CECL and ASC 842 accounting complications

The convergence of EGRRCPA rulemaking with CECL and ASC 842 accounting changes brings together many planning elements including asset size/risk category; capital, liquidity and stress testing requirements; current expected credit losses; and plans for bank owned or leased properties. For all banking organizations, the implementation of CECL and ASC 842 requirements will use capital resources while gains on sale-leaseback transactions can be a source of retained earnings and capital. For smaller banks with total assets less than $10 billion (98% of U.S. banks), preferred stock can be an attractive source of capital under the CBLR.

Changes in asset size and risk category, whether from organic growth or M&A activity, trigger different requirements for capital, liquidity and stress testing change. Community banks generally have a two-quarter grace period to switch capital regimes between Basel III, CBLR and the Policy statement except in the case of a business combination. For CECL, all banking organizations can amortize their CECL charge over three years except in the case of a business combination where the seller's full remaining charge must be reflected in pro forma financials. For ASC 842, there are no exceptions to the timing for implementation other than reporting type of PBE or Non-PBE.

The challenge for prudent banking organizations is to develop a business plan that anticipates these changes and charts a smooth transition under most likely scenarios. Chart A on page 3 presents an integrated framework for EGRRCAP, CECL, ASC 842 and capital sources and uses over time in a single diagram that can be a useful guide or playbook as bank management teams, boards and investors plan for the challenges ahead.

Summary

Regulatory simplification without reduction in loss absorbing capacity for both community banks and large banks is a goal on which all can agree. EGRRCPA rulemaking is nearly complete and simplification for community bank capital rules, along with relief for larger bank stress testing, liquidity and EPS will follow. Accounting changes for CECL and ASC 842 will substantially complicate capital planning with CECL charges likely to be significantly more impactful than the adoption of ASC 842. The convergence of EGRRCPA, CECL and ASC 842 place a premium on advance planning to manage transitions between regulatory regimes with these accounting complications.

Appendix – A

Selected Glossary of Key Terms (*)

AACL – Adjusted Allowance for Credit Losses. New term introduced by the regulatory agencies in the final rulemaking NPR on December 21, 2018 for the implementation of CECL. AACL includes only those allowances that have been charged against earnings and retained earnings. AACL amounts would be eligible for inclusion in tier 2 capital for up to 1.25% of risk-weighted assets for banks subject to the standardized approach. AACL includes credit allowances for loans, HTM debt securities, net investment in leases, and off-balance sheet exposures (not insurance) but does not include credit loss allowances related to AFS debt securities and purchased credit deteriorated assets (PCD).

Advanced Approaches Banks – Banks with consolidated assets of $250 billion or more or consolidated on-balance sheet foreign exposures of $10 billion or more. However, pursuant to the new definition of Category I, II, III and IV banking organizations in the EGRRCPA NPR, a bank could be required to use the Advanced Approaches methodology if classified as a Category I or II bank regardless of size.

Accumulated Other Comprehensive Income (AOCI) – Consists of accumulated unrealized gains and losses on certain assets and liabilities (such as available for sale securities) that are not included in net income but are included in equity under U.S. GAAP banking. Most banking organizations that are not advanced approaches banking organization have opted out of AOCI and currently exclude most components of AOCI from CET1. The CBLR permits qualifying banking organizations to exclude all components of AOCI from CBLR tangible equity. Note that the revised risk management classification from EGRRCPA requires that Category I and II banking organizations cannot opt out of AOCI being included in regulatory capital calculations.

ACL – Allowance for Credit Losses. Term introduced by FASB in ASU 2016-12 and applies to both financial assets and AFS debt securities. Represents an estimate of the expected credit losses on financial assets measured at amortized cost, using relevant information about past events, including historical credit loss experience on financial assets with similar risk characteristics, current conditions, and reasonable and supportable forecasts that affect the collectability of the remaining cash flows over the contractual term of the financial asserts. Difference between current reserve and expected future losses recognized in the period of adoption for GAAP purposes but may be amortized for three years for regulatory capital and accounting purposes.

ASC 842 – ASU 2016-02 Leases (Topic 842) otherwise known as ASC 842. Under lease accounting standard (ASC 842), operating leases will be added back to the balance sheet through the present value of a right of use asset (risk-weighted 100%) offset by the present value of the lease liability. Gains on the sale and leaseback of property are recognized upfront rather than being amortized over the life of the lease.

Basel III Simplification NPR – On September 27, 2017, the Board, OCC, and FDIC issued a NPR regarding several proposed simplifications of the Basel III capital rules issued in 2013. The NPR proposed lowering the risk weighting from 150% on HVCRE loans to 135% on loans classified as HVADC but changing the definition to include more loans as HVADC. The NPR proposed to increase the step one cap on permitted investment in MSAs, DTAs, and UFIs from 10% of CET1 capital to 25% and eliminate the step 2 cap of 15%. The NPR also proposed to allow minority interest to be included for up to 10% of the parent banking organization's CET1, tier 1 or total capital. Subsequent to this NPR being released, EGRRCPA confirmed that the HVCRE loan risk weighting would be 150% but would apply to far fewer loans. Otherwise, there has been no regulatory response on the inclusion of 10% minority interest or the increase in the caps from 10 to 25% for Basel III.

Community Bank Leverage Ratio (CBLR) – Qualifying community banking organizations with 9% or more tangible equity/tangible to be well capitalized. (see definition of qualifying community banking organization).

Cross Jurisdictional Activity – Defined as the sum of cross-jurisdictional assets and liabilities as reported on the FR Y-15 by holding companies. This requirement replaces the current limit of $10 billion or more in foreign exposure to be considered an advanced approaches bank with a $75 billion exposure threshold for cross-jurisdictional activity. Note that this measure does not include the assets and liabilities from positions in derivative contracts.

Cumulative Preferred Stock – CBLR allows cumulative preferred stock to be included as tangible equity. Dividends on cumulative preferred stock are accrued if unpaid. Any unpaid cumulative preferred dividends must be paid before the payment of any common dividends. Historically, only non-cumulative perpetual preferred stock has been included in tier 1 capital. An open issue at this time is whether the preferred stock would have to have a perpetual maturity. We expect this to be resolved in the NPR rulemaking process.

Deferred Tax Assets (DTAs) – Under the CBLR proposal, qualifying community banks would be limited to temporary difference DTAs net of any valuation allowance of 25% or less of CBLR tangible equity. Temporary difference DTAs are recognized in one period for financial reporting period but another period for tax purposes. Banking organizations may not be able to fully realize temporary difference DTAs under adverse financial conditions since the ability to realize the temporary difference DTA is dependent on future income.

CET1 – Common equity tier 1 capital as defined in the Basel III final capital rules.

EGRRCPA – Economic Growth, Regulatory Relief, and Consumer Protection Act as more fully described herein.

Eligible TLAC – Debt and equity issued to third parties that counts as tier 1/tier 2 capital as well as debt that is (i) paid-in, (ii) unsecured, (iii) perpetual or has a remaining maturity of at least 1 year, and non-redeemable by the holder within one year, (iv) must absorb losses prior to "excluded liabilities" in insolvency, without giving rise to compensation claims or legal challenge, (v) subordinated to excluded liabilities, (vi) may be ranked as senior to capital instruments, including tier 2 subordinated debt, and (vii) cannot be hedged or netted in a way that would reduce ability to absorb losses.

GSIB – Global Systemically Important Bank as determined by the Financial Stability Board and updated yearly. The eight firms currently identified as U.S. GSIBs are Bank of America Corporation, The Bank of New York Mellon Corporation, Citigroup, Inc., Goldman Sachs Group, Inc., JP Morgan Chase & Co., Morgan Stanley, State Street Corporation, and Wells Fargo & Company. Source: http://www.fsb.org/wp-content/uploads/2016-list-of-global-systemically-important-banks-G-SIBs.pdf.

Lease Liability – The sum of the present value of the lease payments associated with an operating lease pursuant to ASC 842 using the discount rate specified in the lease of the company's incremental borrowing rate.

Liquidity Coverage Ratio (LCR) – Large internationally active (Category I and II) banking organizations are required to maintain a minimum amount of high quality liquid assets (HQLA) to withstand 100% of liquidity needs in a 30-day standardized stress scenario. A banking organization must have sufficient HQLA amount (the LCR numerator) to cover the total net cash outflows (the LCR denominator) within the 30-calendar-day period. Category III and IV banking organizations only required to meet 70 to 85% of 30-calendar-day liquidity requirements.

Mortgage Servicing Assets (MSAs) – Contractual agreement where the right or rights to service an existing single family mortgage are sold by the original lender to another party that specializes in the functions or servicing mortgages. Calculated in accordance with the reporting instructions to Schedules RC-M of the Call Report or HC-M of Form FR Y-9C. Under the CBLR NPR, qualifying community banking organizations would be limited to 25% or less of CBLR tangible equity invested in MSAs.

Net Stable Funding Ratio – Large internationally active (Category I and II) banking organizations are required to maintain total available stable funding (ASF) greater than total required stable funding (RSF). A bank's total ASF is the portion of its capital and liabilities that will remain with the institution for more than one year. An ASF factor (ranging from 0 to 100%) is assigned to the carrying value of each element of funding based on the expectation that it would be fully available for funding in more than one year. A bank's total RSF is the amount of stable funding that it is required to hold given the liquidity characteristics and residual maturities of its assets and the contingent liquidity risk arising from its off-balance sheet exposures. For each item, the RSF amount is determined by assigning an RSF factor (ranging from 0 to 100%) to the carrying value of the exposure. A banking organization must have sufficient RSF to cover the RSF for more than the one-year horizon. Category III and IV banking organizations are only required to meet 70 to 85% of NSFR requirements.

Nonbank Assets – For risk classification (I, II, III, IV) purposes, measured as the average amount of equity investments in nonbank subsidiaries.

Non-cumulative Preferred Stock – CBLR allows non-cumulative preferred stock to be included as tangible equity. Historically, only non-cumulative perpetual preferred stock has been included in tier 1 capital but it is not clear at this time that the preferred stock would have to be perpetual. We expect this to be resolved in the NPR rulemaking process.

Off-Balance Sheet Exposures – For CBLR purposes, the total off balance sheet exposure would be calculated as the sum of the notional amounts of: the unused portions on loan commitments (excluding unconditionally cancellable commitments); self-liquidating trade-related contingent items and transaction-related contingent items; sold credit protection in the form of guarantees and credit derivatives; credit enhancing representations and warranties; off balance sheet securitization exposures; letters of credit; forward agreements that are not derivatives contracts; and securities lending and borrowing transactions. Note that the calculation of off balance sheet exposures for the CBLR does not require that off-balance sheet exposure be converted to on-balance sheet equivalents and assigned the appropriate risk weight. For risk classification (I, II, III, IV) purposes, off-balance sheet exposures is one of the four new risk metrics proposed by regulators as part of the EGRRCPA rework of stress testing, liquidity, and enhanced prudential standards management. This metric applies to holding companies with more than $100 billion in assets and defines total exposure (from FR Y-15) minus total consolidated assets (from FR Y-9C). Total exposure includes a banking organization's on-balance sheet assets plus certain off-balance sheet exposures including derivatives exposures, repo-style transaction, and other off-balance sheet exposures.

PBE – For purposes of compliance with CECL, a PBE represents a public business entity that is not a SEC filer but would include: (i) an entity that has issued securities that are traded, listed or quoted on an over-the-counter market, and (ii) an entity that has issued one or more securities that are not subject to contractual restrictions on transfer and is required by law, contract or regulation to prepare U.S. GAAP financial statements (including footnotes) and make them publicly available periodically.

Prompt Corrective Action (PCA) – Bank level capital ratios required to maintain well capitalized, adequately capitalized, undercapitalized, significantly undercapitalized, or critically undercapitalized status. With the new CBLR, the regulatory agencies have proposed CBLR ratios associated with each of the PCA categories as follows: well capitalized = greater than or equal to 9.00%; adequately capitalized = greater than or equal to 7.5% but less than 9.00%; undercapitalized = greater than 6.0% but less than 7.5%; significantly undercapitalized = less than 6.0%.

Qualifying Community Bank (for CBLR) – Community banking organizations with 9.00% or more of CBLR tangible equity and that meet the following criteria: (i) less than $10 billion of total consolidated assets, (ii) total off-balance sheet exposures of less than 25% of total consolidated assets, (iii) total trading assets and liabilities less than 5% of total consolidated assets, (iv) mortgage servicing assets (MSAs) less than 25% of CBLR tangible equity, (v) temporary difference DTAs of less than 25% of CBLR tangible equity, and (vi) not subject to any written agreement, order or capital directive.

Right of Use Asset – The present value of the right to use a leased asset pursuant to ASC 842 using the discount rate specified in the lease of the company's incremental borrowing rate.

RWA – Risk weighted assets that comprise the denominator in the risk weighted assets ratio applicable to Basel III.

S.2155 – See EGRRCPA

SEC filer – For purposes of compliance with CECL, an SEC filer is an entity that is required to file its financial statements with the SEC under the federal securities laws or, for an insured depository institution, the appropriate federal banking agency under section 12(i) of the Securities Exchange Act of 1934.

Step 1 Cap – The limit of no more than 10% of CET1 for investment in MSAs, temporary difference DTAs or unconsolidated financial institutions as defined in the October 11, 2013, Federal Register, Volume 78, No. 198, (pages 62055 to 62072), regulatory adjustments and deductions from common equity tier 1 capital included in the Basel III capital rules.

Step 2 Cap – The combined limit of 15% of CET1 for an investment in MSAs, temporary difference DTAs and unconsolidated financial institutions with investment in any one category not exceeding 10% of CET1. This cap was defined in the October 11, 2013, Federal Register, Volume 78, No. 198, (pages 62055 to 62072), regulatory adjustments and deductions from common equity tier 1 capital included in the Basel III capital rules.

Tangible Equity – CBLR tangible equity consists of total bank equity capital (or BHC as applicable) less: (i) accumulated other comprehensive income (AOCI), (ii) all intangible assets (other than MSAs), and (iii) DTAs, net of any related valuation allowance. Common equity must comprise the majority of tangible equity that can include both cumulative and non-cumulative perpetual preferred stock. The CBLR excludes minority interest from tangible equity.

TLAC – Total loss absorbing capacity rules and requirements applicable to 8 U.S. GSIBs and 22 foreign GSIBs.

Total Trading Assets – For CBLR purposes, a qualifying community bank is required to have 5% or less of trading assets and liabilities. This indicator is calculated as the sum of exposures in schedules RC of the Call Report or HC of the Form FR Y-9C. This ratio consists of the total trading assets and liabilities dividends by total consolidated assets.

Total Weighted Short Term Wholesale Funding – One of the four new risk metrics proposed by regulators as part of the EGRRCPA rework of stress testing, liquidity, and enhanced prudential standards management. This short-term funding indicator is reported on the FR Y-15 by holding companies and is consistent with the calculation used for the GSIB surcharge. This measure shows a banking organization's liquidity risk from short-term, generally uninsured funding for investment in longer-term assets.

UFIs – Unconsolidated Financial Institutions. Investment in UFIs is currently subject to a two-step cap: (i) 10% of adjusted CET1 (but may potentially be increased to 25% under the proposed Basel III simplification) and (ii) 15% cap of adjusted CET1 for the combination of investment in UFIs, MSAs and DTAs.

(*) This is intended to provide a brief summary of the key terms mentioned in this report. For a complete list of all links to key source documents see list below:

- EGRRCPA: https://www.congress.gov/bill/115th-congress/senate-bill/2155
- Notice of Proposed Rulemaking for CBLR: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20181121c.htm
- Notice of Proposed Rulemaking for Stress testing, Liquidity, and ESP for large bank holding companies and savings and loan holding companies: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20181031a.htm
- ASC 842: https://www.fasb.org/jsp/FASB/FASBContent_C/CompletedProjectPage&cid=1176167904031
- CECL: https://www.fasb.org/jsp/FASB/Document_C/DocumentPage?cid=1176168232528

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