



FEDERAL RESERVE BANK *of* NEW YORK

U.S. Regulatory Capital Reform

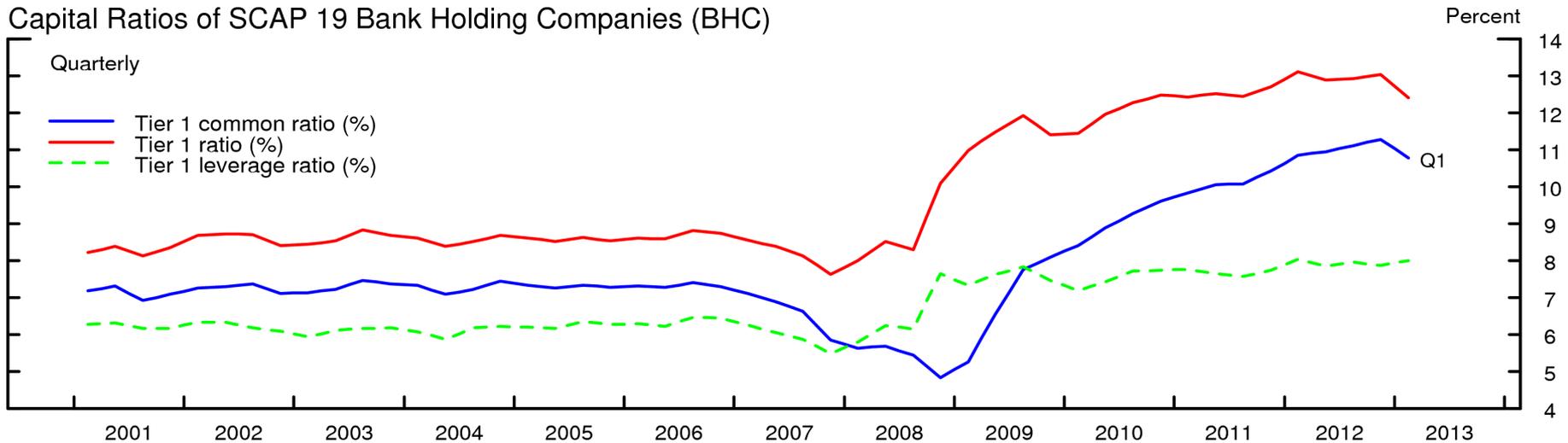
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Capital Ratios of Large U.S. Bank Holding Companies

Chart 1
Capital Ratios of SCAP 19 Bank Holding Companies (BHC)



Note: In May 2009, 19 BHCs were assessed in the Supervisory Capital Assessment Program (SCAP). In this chart, GS, MS, Ally, and Amex are excluded prior to 2009, as they were not yet bank holding companies. MetLife is no longer a BHC and is excluded from 2012Q4 and 2013Q1 calculations.

Source: FR Y9-C.



Fully Phased-in Risk-based Capital Ratio Requirements

- Common equity tier 1 (CET1) ratio:

$$\frac{\text{CET1}}{\text{RWA}} \geq 4.5\%$$

- Tier 1 risk-based capital (T1) ratio:

$$\frac{\text{T1}}{\text{RWA}} \geq 6\%$$

- Total risk-based capital ratio:

$$\frac{\text{Total Capital}}{\text{RWA}} \geq 8\%$$

- Furthermore:

- Capital conservation buffer, countercyclical capital buffer, G-SIB buffer, leverage ratios, liquidity requirements



Capital Conservation Buffer

- All banking organizations subject to capital conservation buffer of 2.5%
- Must be met with common equity tier 1 capital

Transition Schedule for the Capital Conservation Buffer				
	Jan 1 2016	Jan 1 2017	Jan 1 2018	Jan 1 2019
Capital conservation buffer	0.625%	1.25%	1.875%	2.5%

- If sufficient capital is not held to meet capital conservation buffer, banking organizations subject to limitations on dividends and bonuses

Payout Constraints based on the Capital Conservation Buffer (Fully Phased-in)	
Capital Conservation Buffer	Maximum payout ratio (as a % of eligible retained income)
Greater than 2.5%	No payout ratio limitation applies
Less than or equal to 2.5%, and greater than 1.875%	60%
Less than or equal to 1.875%, and greater than 1.25%	40%
Less than or equal to 1.25%, and greater than 0.625%	20%
Less than or equal to 0.625%	0%



Countercyclical Capital Buffer

- Applicable to advanced approaches banking organizations only
- Initially set at 0% and could extend to maximum of 2.5%
 - In general, agencies announce buffer 12 months prior to implementation
 - A decrease in buffer would take effect immediately
- Held in addition to risk-based capital requirements and conservation buffer
- Must be met with common equity tier 1 capital

Transition Schedule for the Countercyclical Buffer				
	Jan 1 2016	Jan 1 2017	Jan 1 2018	Jan 1 2019
Countercyclical Buffer (maximum)	0.625%	1.25%	1.875%	2.5%

- If countercyclical buffer is not met, banking organization are subject to limitations on capital distributions and bonuses



G-SIB Surcharge

- Global systemically important bank (G-SIB) surcharge not addressed in revised US regulatory capital rule
- G-SIB surcharge methodology focuses on 12 indicators of systemic risk (size, cross-border activity, interconnectedness, substitutability and complexity)
- Implemented through extension of capital conservation buffer; must be met with common equity tier 1 capital

G-SIB Surcharge	G-SIB
2.5%	HSBC JP Morgan Chase
2.0%	Barclays BNP Paribas Citigroup Deutsche Bank
1.5%	Bank of America Credit Suisse Goldman Sachs Group Crédit Agricole Mitsubishi UFJ FG Morgan Stanley Royal Bank of Scotland UBS
1.0%	Bank of China Bank of New York Mellon BBVA Groupe BPCE Industrial and Commercial Bank of China Limited ING Bank Mizuho FG Nordea Santander Société Générale Standard Chartered State Street Sumitomo Mitsui FG Unicredit Group Wells Fargo



Leverage Ratios

- **Generally applicable leverage ratio**
 - Applies to all banking organizations
 - Effective Jan 2015, replaces previous leverage ratio
 - 4% Tier 1 Capital / Average on balance sheet assets
- **Supplementary leverage ratio**
 - Applies to advanced approach banking organizations
 - Effective Jan 2018
 - 3% Tier 1 Capital / Average On + Off balance sheet exposures
- **U.S. enhanced supplementary leverage ratio**
 - Applies to G-SIBs (assets > \$700Bn or custody assets > \$10Tr)
 - Effective Jan 2018
 - 2% buffer on top of 3% minimum



Liquidity Requirements

- Basel III introduces liquidity standards in response to lessons learned from financial crisis:
 - Economically viable firms may fail due to acute reductions in supply of liquidity during period of market-wide and idiosyncratic stress
 - Mismatches in liquidity value of assets and relative stability of liabilities can exacerbate liquidity crunch
- Liquidity Coverage Ratio requires high quality liquid assets against net cash outflows over a 30-day stress scenario

$$\frac{\text{Stock of unencumbered high quality liquid assets}}{\text{Net stressed cash outflows over next 30 calendar days}} \geq 100\%$$

- Implementation starting January 2015
- Net Stable Funding Ratio mandates minimum amount of “stable” funding relative to liquidity characteristics of institution’s exposures

$$\frac{\text{Available stable funding}}{\text{Required stable funding}} \geq 100\%$$

Implementation expected 2018



Appendix



References

- **Revised regulatory capital rule**
 - <https://www.federalregister.gov/articles/2013/10/11/2013-21653/regulatory-capital-rules-regulatory-capital-implementation-of-basel-iii-capital-adequacy-transition>
- **Enhanced Supplementary Leverage Ratio rule**
 - <http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20140408a1.pdf>
- **Supplementary leverage ratio**
 - <http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20140408a2.pdf>
- **Liquidity Coverage Ratio**
 - BIS Standard: www.bis.org/publ/bcbs238.htm
 - US Proposed Rule: <http://www.federalreserve.gov/newsevents/press/bcreg/20131024a.htm>
- **Net Stable Funding Ratio Consultative Paper**
 - BIS Consultative Paper: <http://www.bis.org/publ/bcbs271.htm>



Denominator for the Supplementary Leverage Ratio

- Balance sheet assets (less amounts deducted from tier 1 capital), excluding on-balance sheet derivative and securities financing transaction (SFT) exposures, for which there are specific measurement requirements
- Replacement cost plus potential future exposure for derivatives; cash variation margin may reduce replacement cost if certain conditions met
- Effective notional amounts of written credit derivatives capped at level of maximum potential loss; some recognition of hedges if certain conditions met
- Gross value of receivables related to SFT less receivables; allows limited netting with same counterparty if specific conditions met
- Notional amount of all other off-balance sheet exposures, multiplied by standardized approach credit conversion factor, subject to 10% floor for unconditionally cancellable commitments



Components of Capital (numerator)

Basel I	Basel III
<p><u>COMMON EQUITY TIER 1:</u></p> <ul style="list-style-type: none"> ▪ Not explicitly defined ▪ Supervisory expectation that common equity serve as 'predominant' form of tier 1 capital, but not binding 	<p><u>COMMON EQUITY TIER 1:</u></p> <ul style="list-style-type: none"> ▪ Common stockholders' equity ▪ Less: goodwill, other intangibles, etc. ▪ Limited recognition (10% of tier 1 common on individual basis or 15% on aggregated) of significant investments in the common shares of unconsolidated financial institutions; mortgage servicing rights; and DTAs arriving from temporary timing differences ▪ Deductions and filters to common equity tier 1 flow through to tier 1 and total capital ▪ Unrealized gains (losses) on AFS securities no longer filtered out
<p><u>TIER 1 CAPITAL:</u></p> <ul style="list-style-type: none"> ▪ Common stockholders' equity ▪ Non-cumulative perpetual preferred, cumulative perpetual preferred ▪ Limited recognition of TRUPs, mandatory convertible preferred securities ▪ Less: goodwill, other intangibles, DTAs exceeding certain limits ▪ Less: unrealized gains (losses) on AFS debt securities 	<p><u>TIER 1 CAPITAL:</u></p> <ul style="list-style-type: none"> ▪ Common equity tier 1 ▪ Non-cumulative perpetual preferred
<p><u>TIER 2 CAPITAL (limited to 100% of Tier1):</u></p> <ul style="list-style-type: none"> ▪ Loan loss reserves (limited) ▪ Perpetual preferred (unlimited) ▪ Hybrid capital ▪ Sub debt (limited) ▪ Unrealized gains on available-for-sale equity securities (limited) 	<p><u>TIER 2 CAPITAL:</u></p> <ul style="list-style-type: none"> ▪ Loan loss reserves (limited) ▪ Tier 1 capital per Basel I that does not qualify as tier 1 under Basel III ▪ Sub debt (limited)
<p><u>TIER 3 CAPITAL (supports market risk and subject to various limitations):</u></p> <ul style="list-style-type: none"> ▪ Subordinated debt (at least two-year maturity, lock-in clause, etc.) 	<p><u>TIER 3 CAPITAL:</u></p> <ul style="list-style-type: none"> ▪ Eliminated
<p>TIERS 1+2+3 = TOTAL CAPITAL</p>	<p>TIERS 1+2 = TOTAL CAPITAL</p>



Risk-weighted Assets (denominator)

Basel I	Basel II
<p>Total RWA = Credit Risk RWA + Market Risk RWA</p> <ul style="list-style-type: none"> • Credit Risk: RWA = [\$ amount of asset] x [risk weight] <ul style="list-style-type: none"> ○ Risk weights of 0%, 20%, 50% or 100% depending on credit quality of borrower, guarantor or collateral • Market Risk: RWA based on VaR (99%, 10 day), plus add-on for specific risk (interest rate, equity); required only of firms that meet threshold criteria 	<p>Total RWA = Credit Risk RWA + Market Risk RWA + Operational Risk RWA</p> <ul style="list-style-type: none"> • Credit Risk: <ul style="list-style-type: none"> ○ Advanced internal rating based approach (AIRB), replacing Basel I approach for advanced approaches firms ○ Basel I RWA retained for all other firms • Market Risk: No changes • Operational Risk: RWA based on advanced measurement approach (AMA); applicable only to advanced approaches firms

Basel 2.5/III

<p style="text-align: center;">Total RWA = Credit Risk RWA + Market Risk RWA + Operational Risk RWA</p> <ul style="list-style-type: none"> • Credit Risk: <ul style="list-style-type: none"> ○ AIRB (for advanced approaches firms) <ul style="list-style-type: none"> ▪ Credit ratings removed, particularly relevant for securitization exposures ▪ Retail exposures remain unchanged from Basel II ▪ Wholesale exposures largely unchanged except higher capital requirements for exposures to large financial institutions and counterparty credit risk and introduction of capital requirement for CVA ○ Standardized approach (for non-advanced approaches firms or as floor for advanced approaches firms) similar to Basel I credit risk, with changes to risk weighting for some exposures and removal of credit ratings; replaces Basel I credit RWA beginning January 2015 • Market Risk: Current market RWA with additional requirements, including Basel 2.5 stressed VaR, IRC and CRM (99.9%, 1 year), and standardized securitization capital requirement • Operational Risk (for advanced approaches firms): Remains unchanged from Basel II
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